

TC-RX390

SERVICE MANUAL

US Model
Canadian Model
AEP Model



| | |
|------------------------------------|---------------|
| Model Name Using Similar Mechanism | TC-RX370 |
| Tape Transport Machanism Type | TCM-190RB12CJ |

SPECIFICATIONS

Recording system 4-track 2-channel stereo
Fast winding time Approx. 90 sec. (with Sony C-60 cassette)
Bias AC bias
Heads Erasing head × 1 (F&F head)
Playback/Recording head × 1 (SD head)
Motors Capstan motor × 1 (DC servo motor)
Reel motor × 1 (DC motor)

Signal-to-noise ratio (at peak level)

| Cassette (Dolby NR OFF) | Type IV (Sony Metal-S/Select) | Type II (Sony UX-S) | Type I (Sony HF-S) |
|----------------------------|----------------------------------|------------------------|-----------------------|
| | 58 dB | 57 dB | 55 dB |

Measured at peak level weithted without NR. The S/N is improved by about 15 dB at 500 Hz and by about 20 dB about 1 kHz with Dolby-C NR on, and by 5 dB at 1 kHz and by 10 dB about 5 kHz with Dolby-B NR on.

Harmonic distortion 0.4% (with Sony TYPE I, 160 nWb/m,
315 Hz, 3rd H.D.)
1.8% (with Sony TYPE IV, 250 nWb/m,
315 Hz, 3rd H.D.)

Frequency response (DOLBY NR OFF)

| | |
|---|---|
| Type IV cassette (Sony Metal-S/Select) | 30 - 15,000 Hz (±3 dB, IEC) 30 - 13,000 Hz [±3 dB (-4 dB recording)] |
| Type II cassette (Sony UX-S) | 30 - 15,000 Hz (±3 dB, IEC) |
| Type I cassette (Sony HF-S) | 30 - 14,000 Hz (±3 dB, IEC) |

Wow and flutter ± 0.13% W.Peak (IEC)
0.07% W.RMS (NAB)
± 0.18% W.Peak (DIN)

Inputs

| | | |
|------------------------------|-----------------|-----------|
| Line inputs (phono jacks) | Sensitivity | 0.16 V |
| | Input impedance | 47 k ohms |

Outputs

| | | |
|-----------------------------------|--------------------|---|
| Line outputs (phono jacks) | Rated output level | 0.5 V at a load impedance of 47 k ohms |
| | Load impedance | Over 10 k ohms |
| Headphones (stereo phono jack) | Output level | 1 mW at a load impedance of 32 ohms |

General

Power requirements

US, Canadian Model :120V AC, 60 Hz
AEP Model : 220-230V AC, (or 240V AC adjustable by
Sony personnel), 50/60 Hz

Power consumption

21 W

Dimensions

Approx. 430 × 123 × 300 mm (w/h/d)
(17 × 4⁷/₈ × 11⁷/₈ inches)
including projecting parts and controls

Weight

Approx. 3.8 kg (8 lbs 6 oz)

Supplied accessories

Audio connecting cords (2)

Design and specifications are subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding
interference suppression.

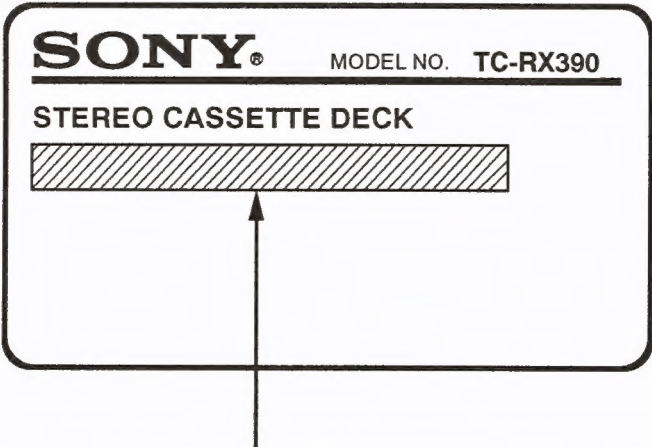


STEREO CASSETTE DECK
SONY®

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MODEL IDENTIFICATION
(Specification Label)



US, Canadian model : AC 120V 60Hz 21W
AEP model : AC 220-230V~50 /60Hz 21W

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

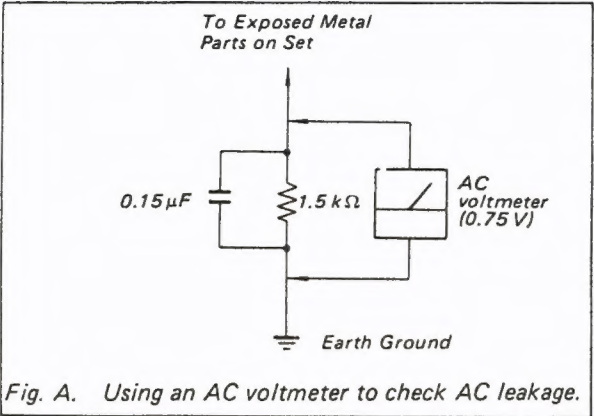


Fig. A. Using an AC voltmeter to check AC leakage.

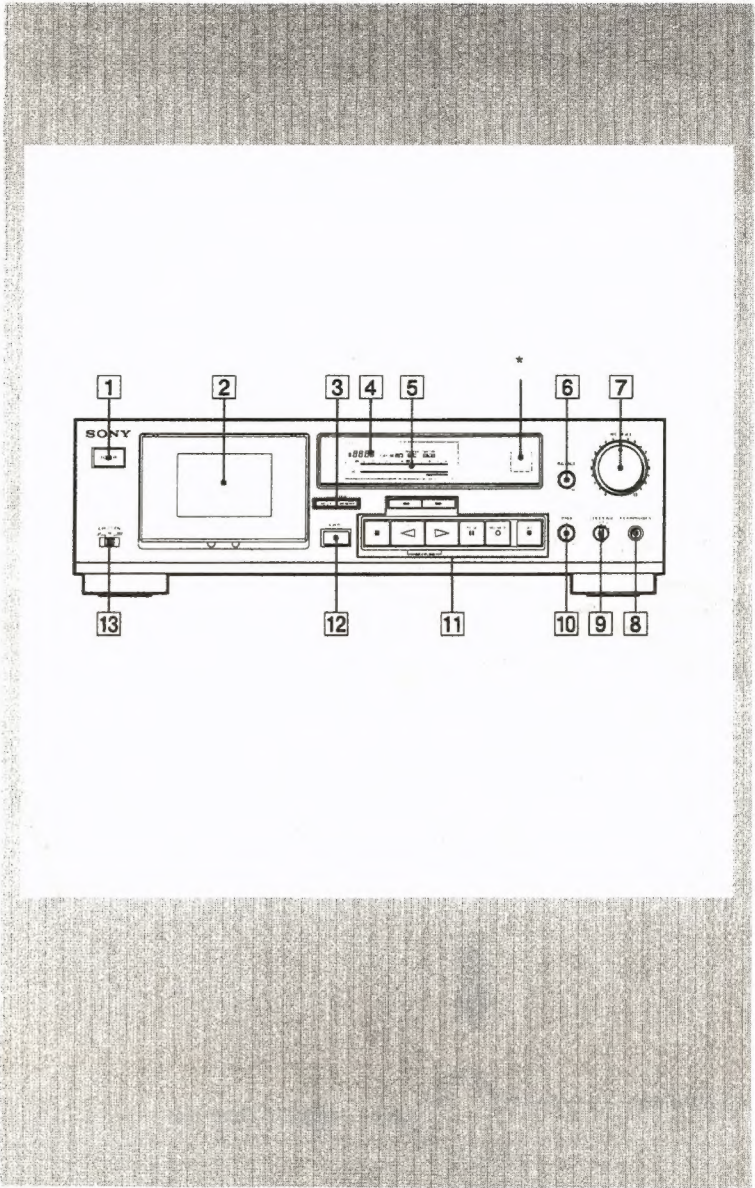
SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY MARK OR DOTTED LINE WITH MARK ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

1-1. IDENTIFYING THE PARTS



Front Panel

For details, refer to the page number indicated in parenthesis .

- 1 POWER switch
- 2 Cassette holder
- 3 Counter buttons
 - RESET button
 - MEMORY button
- 4 DIGITAL COUNTER
- 5 PEAK LEVEL METER
- 6 BALANCE control
- 7 REC (recording) LEVEL control
- 8 HEADPHONES jack (stereo phone jack)
- 9 DOLBY NR (noise reduction) switch
- 10 BIAS control
- 11 Tape operation buttons
 - ◀ (leftward fast winding) button
 - ▶ (rightward fast winding) button
 - (stop) button
 - ◀ (reverse play) button
 - ▶ (forward play) button
 - || PAUSE button
 - REC MUTE (record muting) button
 - REC (recording) button
- 12 ▲ (eject) button
- 13 DIRECTION mode switch

* Remote control sensor
You can remotely control this cassette deck with:
— A remote commander that came with a Sony amplifier or receiver if it has the mark and cassette deck control capability.
— An optional Sony remote commander with the mark and cassette deck control capability.

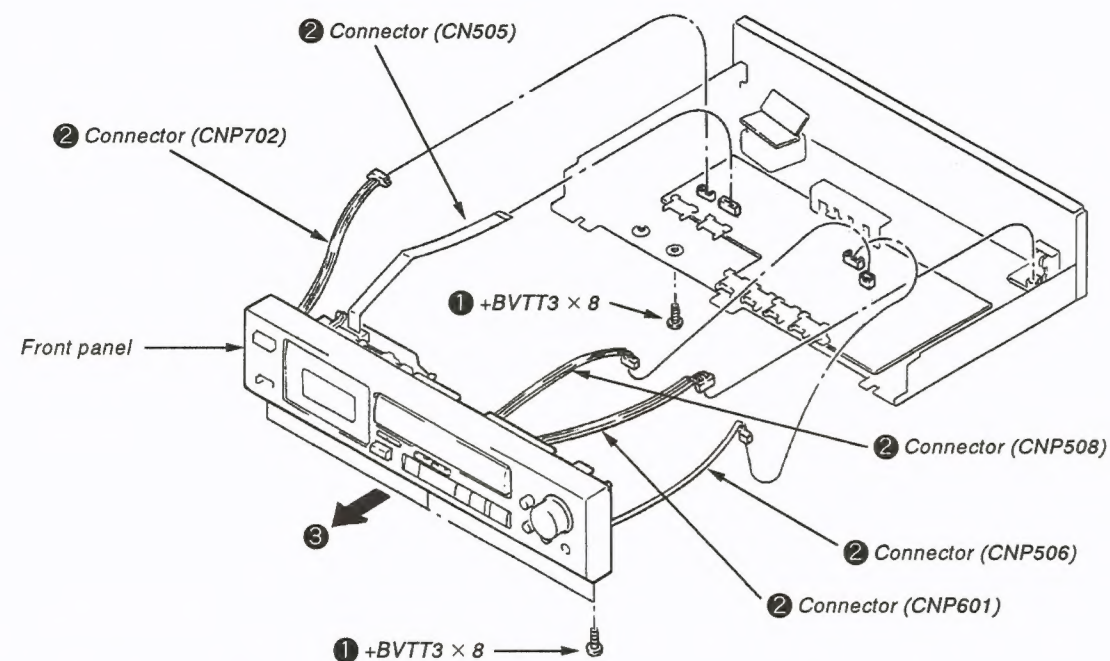
SECTION 2 DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

CASE

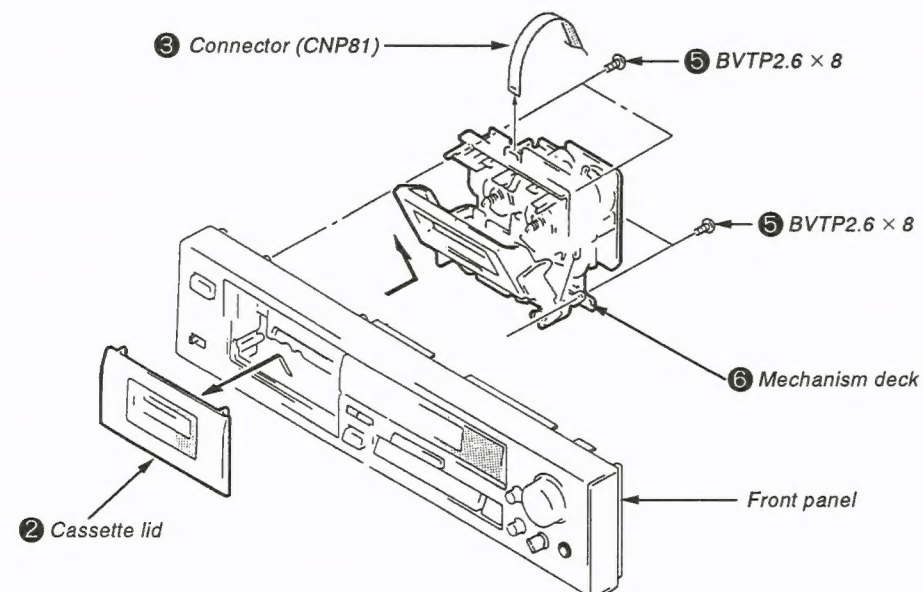
Unscrew the four case attachment screws M3 × 8 and remove the case.

2-1. FRONT PANEL

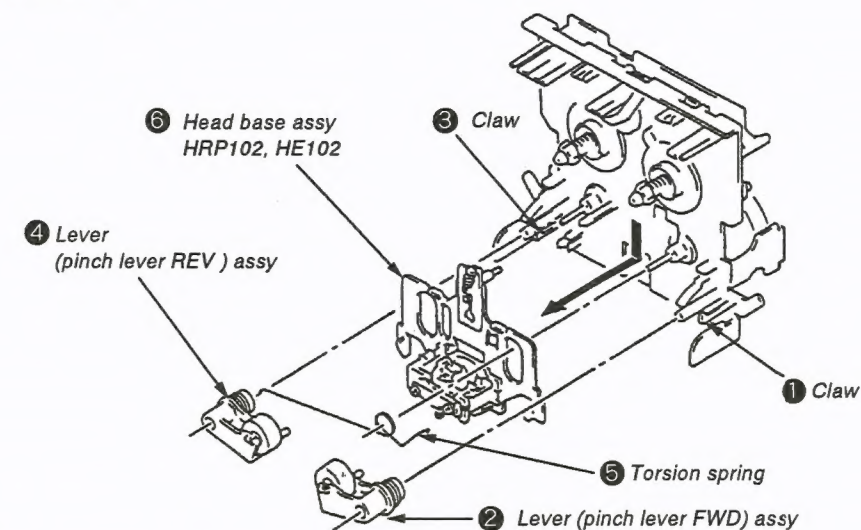


2-2 MECHANISM DECK

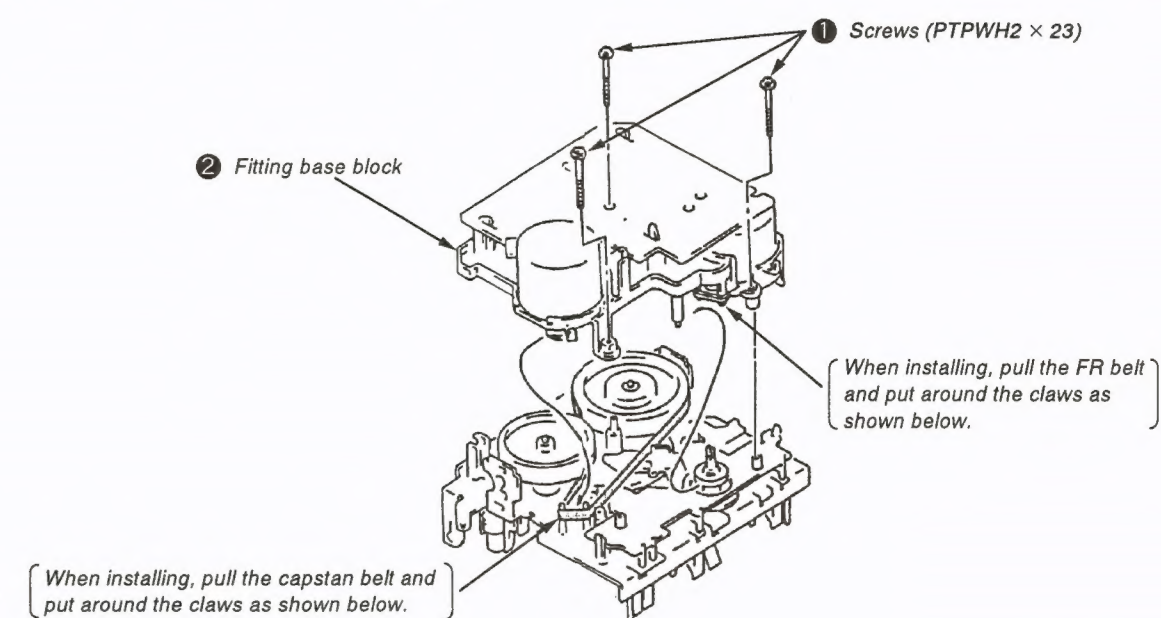
1 Press the eject button.



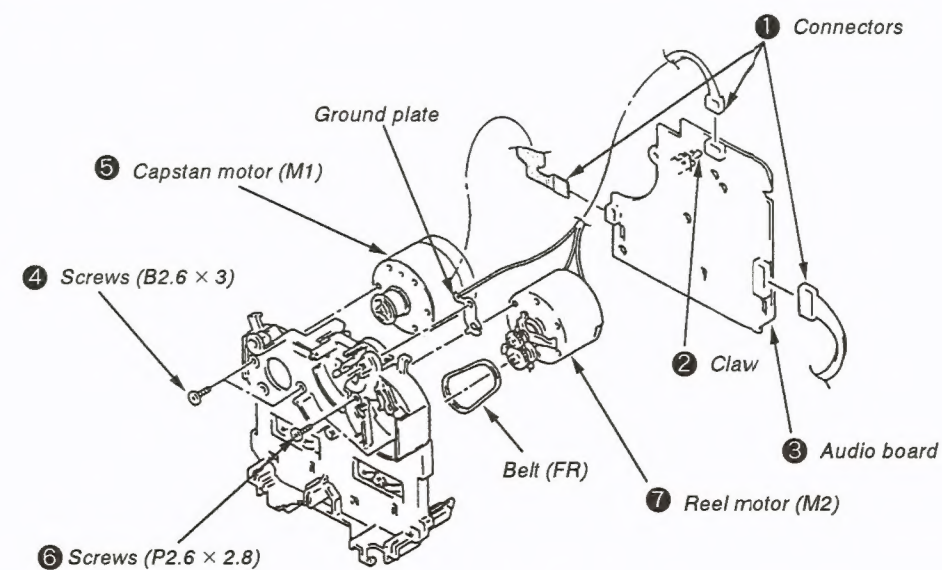
2-3. HEAD



2-4. FITTING BASE BLOCK

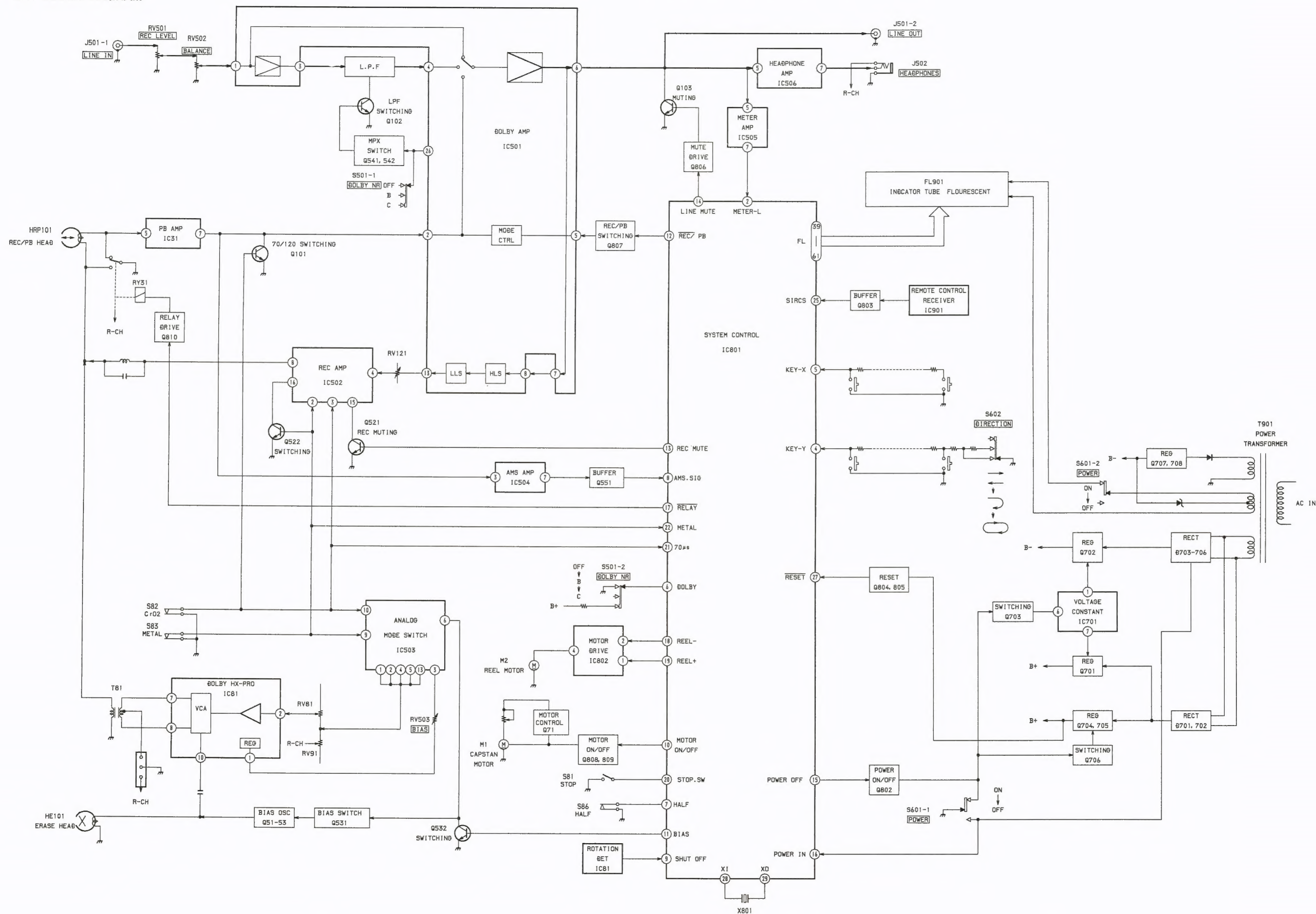


2-5. MOTOR



SECTION 3 BLOCK DIAGRAM

3-1. BLOCK DIAGRAM



SECTION 4
EXPLANATION OF IC TERMINALS

IC801 M50940-395SP

| Pin. No. | Terminal name | I/O | Terminal explanation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---------------|------|--|-----|----|------|---------------|---|---|---------------|-------|-----------------------------|------|-----|-----|-----|----|----|-----|----|------|-----|-----|----|------|----|----|----|----|-----|----|----|----|
| 1 | VREF | I | Reference voltage 5V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | METER LCH | I | Meter level Lch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | METER RCH | I | Meter level Rch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | KEY Y | I | 0V = stop, 0.8V = rew, 1.7V = ff, 2.6V = rec, 3.4V = ssw, 4.2V = , 5V = | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | KEY X | I | 0V = pause, 0.8V = fwd, 1.7V = rev, 2.6V = recm, 3.4V = reset, 4.2V = memory | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | DOLBY | I | OFF : 0 – 2.2V, B : 2.2 – 4.8V, C : 4.8V – | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | HALF | I | <table><tr><th colspan="3">Switch status</th><th rowspan="2">Input Voltage</th></tr><tr><th>REC A</th><th>REC B</th><th>HALF</th></tr><tr><td>OFF</td><td>OFF</td><td>OFF</td><td>5V</td></tr><tr><td>ON</td><td>OFF</td><td>ON</td><td>3.9V</td></tr><tr><td>OFF</td><td>OFF</td><td>ON</td><td>2.8V</td></tr><tr><td>ON</td><td>ON</td><td>ON</td><td>2V</td></tr><tr><td>OFF</td><td>ON</td><td>ON</td><td>1V</td></tr></table> | | | | Switch status | | | Input Voltage | REC A | REC B | HALF | OFF | OFF | OFF | 5V | ON | OFF | ON | 3.9V | OFF | OFF | ON | 2.8V | ON | ON | ON | 2V | OFF | ON | ON | 1V |
| Switch status | | | Input Voltage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| REC A | REC B | HALF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OFF | OFF | OFF | 5V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ON | OFF | ON | 3.9V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OFF | OFF | ON | 2.8V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ON | ON | ON | 2V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OFF | ON | ON | 1V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | AMS. SIG | I | Ams signal input 2.5V < MUSIC, 2.5V > not MUSIC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | SHUT OFF | I | Supply pulse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | MOTOR ON/OFF | O | Capstan motor. 5V = ON, 0V = OFF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | BIAS | O | Bias osc 5V = ON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | REC/PB | O | Recording/Playback selector for Dolby IC select 0V = Record, 5V = Playback | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | REC MUTE | O | Rec out mute. 5V = MUTE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | LINE MUTE | O | Line out mute. 0V = MUTE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | POWER OFF | O | 0V = Power OFF, cut OFF = Power ON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | POWER IN | I | 0V = Power OFF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | RELAY | O | Relay selector. 5V = Record, 0V = Playback | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | REEL – | O | <table><tr><td>trg</td><td>ff</td><td>play</td><td>stop</td></tr><tr><td>0</td><td>1</td><td>open</td><td>0</td></tr></table> | trg | ff | play | stop | 0 | 1 | open | 0 | The open is high impedance. | | | | | | | | | | | | | | | | | | | | | |
| trg | ff | play | stop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 1 | open | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | REEL + | O | <table><tr><td>1</td><td>0</td><td>0</td><td>0</td></tr></table> | 1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | STOP. SW | I | Mecha stop mode SW. 5V = stop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | 70 μ S | I | Tape type 2. 5V = ON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | METAL | I | Tape type 4. 5V = ON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | NC | I | GND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | NC | I | GND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | SIRCS | I | Sircs signal in | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | CNVSS | I | GND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | RESET | I | Reset. 0V = Reset | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | XIN | I | System clock in | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | XOUT | O | System clock out | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | CXIN | I | Not used | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | CXOUT | O | Not used | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | VSS | I | GND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | NC | O | Not used | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 34 | VERSION | I | 5V = rev, 0V = oneway | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 35 | TEST | I | Test mode selector. 5V = normal, 0V = test mode | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Pin. No. | Terminal name | I/O | Terminal explanation |
|----------|---------------|-----|-----------------------------|
| 36 | NC | I | GND |
| 37 | NC | I | GND |
| 38 | – 21V | I | – 21V |
| 39 – 54 | FL-a – p | O | FLT segment |
| 55 – 61 | FL-g5 – g1 | O | FLT grid |
| 62 | NC | O | Not used |
| 63 | AVCC | I | Analog power supply in + 5V |
| 64 | VCC | I | Power supply in + 5V |

IC502 CXA1579P

| Pin. No. | Terminal name | I/O | Terminal explanation |
|----------|---------------|-----|---|
| 1 | SPEED | I | GND |
| 2 | METAL | I | Metal tape selector terminal “H” : METAL |
| 3 | 70 μ S | I | CrO ₂ tape selector terminal “H” : CrO ₂ |
| 4 | REC IN1 | I | Recording equalizer amp input terminal |
| 5 | GND | | GND |
| 6 | BOOST1 | I | External capacitor for low-pass boost connecting terminal |
| 7 | VEE | | – 7.5V |
| 8 | REC OUT1 | O | Recording equalizer amp output terminal |
| 9 | REC OUT2 | O | Recording equalizer amp output terminal |
| 10 | VCC | | + 7.5V |
| 11 | BOOST2 | | External capacitor for low-pass boost connecting terminal |
| 12 | IREF | O | Standard current setting terminal of monolithic filter |
| 13 | REC IN2 | I | Recording equalizer amp input terminal |
| 14 | REC CAL | I | Recording calibration terminal “H” : Recording level gain down |
| 15 | REC MUTE | I | Recording Mute ON/OFF selector terminal “H” : Mute OFF “L” : Mute ON |
| 16 | GP CAL | I | High-pass calibration terminal “H” : High-pass level gain down “L” : High-pass level gain up |

SECTION 5 ADJUSTMENTS

5-1. MECHANICAL ADJUSTMENTS

PRECAUTION

- Clean the following parts with a denatured alcohol-moistened swab:

| | |
|----------------------------|--------------|
| record/playback/erase head | pinch roller |
| rubber belts | capstan |
| idlers | |
- Demagnetize the record/playback head with a head demagnetizer. (Head demagnetizer do not approach for the erase head.)
- Do not use a magnetized screwdriver for the adjustment.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

| Torque | Torque | Meter reading |
|----------------------|----------|---|
| Forward | CQ-102C | 30 to 65g•cm (0.42 to 0.9 oz•inch) |
| Forward back tension | CQ-102C | 1 to 6g•cm (0.014 to 0.08 oz•inch) |
| Reverse | CQ-102RC | 30 to 65g•cm (0.42 to 0.9 oz•inch) |
| Reverse back tension | CQ-102RC | 1 to 6g•cm (0.014 to 0.08 oz•inch) |
| FF/REW | CQ-201B | 70 to 120g•cm (0.98 to 1.67 oz•inch) |

5-2. ELECTRICAL ADJUSTMENTS

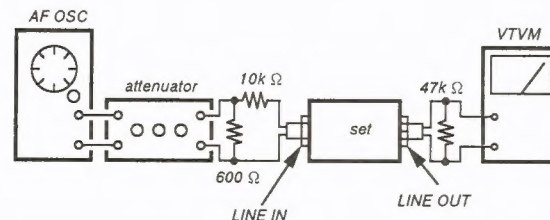
PRECAUTION

- The adjustment should be performed in the publication. (Be sure to make playback adjustment at first.)
- The adjustments and measurement should be performed for both L-CH and R-CH.
 - Switch position

| | |
|-----------------|------------------------|
| DOLBY NR switch | : OFF |
| DIR MODE switch | : \rightleftharpoons |
 - Standard record position:

Deliver the standard input signal level to input jack and set the REC LEVEL control to obtain the standard output signal level as follows.

— Record Mode —



Standard Input Level

| Input terminal | LINE IN |
|--------------------|-----------------|
| source impedance | 10k Ω |
| input signal level | 0.5V (- 3.8dB) |

Standard Output Level

| Output terminal | LINE OUT |
|---------------------|-----------------|
| load impedance | 47k Ω |
| output signal level | 0.5V (- 3.8dB) |

Test Tape

| Tape | Contents | Use |
|----------|---------------|-----------------------|
| P-4-A100 | 10kHz, - 10dB | Azimuth Adjustment |
| P-4-L300 | 315Hz, 0dB | PB Level Adjustment |
| WS-48B | 3kHz, 0dB | Tape Speed Adjustment |

$$0\text{dB}=0.775\text{V}$$

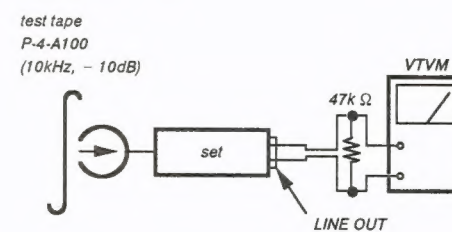
Test Mode

- Insert a short-circuit plug into TP801 (2P) and turn ON the power switch. (Earth pin ⑤ of IC801 and turn ON the power switch.)
The memory is turned ON when the recording starts, and the counter starts counting from "0000".
When applying +5V to pin ⑤ of IC801, the FL tube will be fully lit.
- To release the test mode, remove the short plug and turn off the power switch.
- Remove the short plug after completion of adjustment.

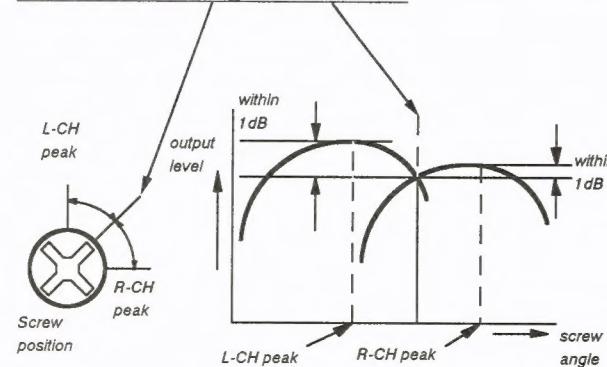
Record/Playback Head Azimuth Adjustment

Procedure :

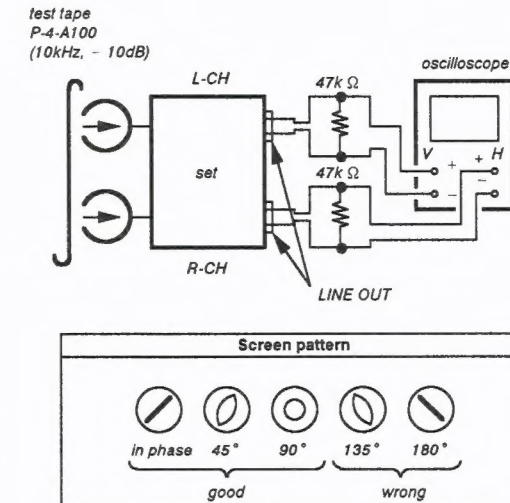
- Forward playback Mode



- Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.

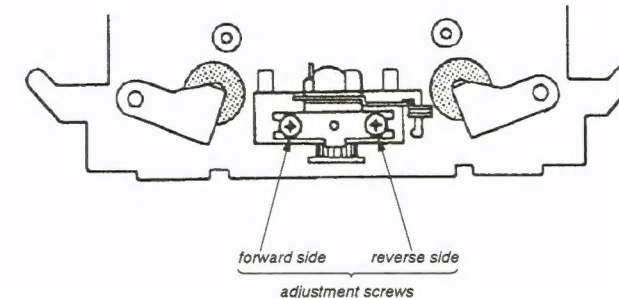


- Playback Mode



- Change the reverse playback mode and repeat the steps 1 to 3.
- After the adjustment, lock the adjustment screws with suitable locking compound.

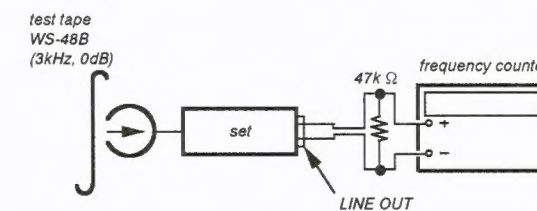
Adjustment Location : — record/playback head —



Tape Speed Adjustment

Procedure :

- Forward Playback Mode —



- Set to FWD playback mode.
- Adjust RV71 so that the frequency counter reading becomes $3,000 \pm 10\text{Hz}$.

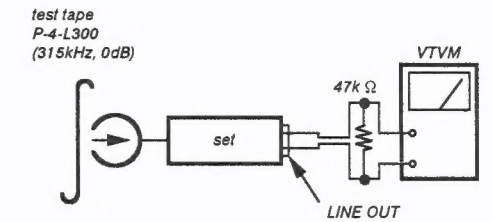
Frequency difference between the beginning and the end of the tape should be within 3%.

Adjustment Location : AUDIO board

Playback Level Adjustment

Procedure :

- Forward Playback Mode —



Adjust RV11(L-CH) and RV21(R-CH) so the VTVM reading becomes the adjustment limits below.

Adjustment Value :

LINE OUT level : $- 7.7 \pm 0.5\text{dB}$ (0.301 to 0.338V)

Level difference between channels : within 0.5dB

Confirm the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times

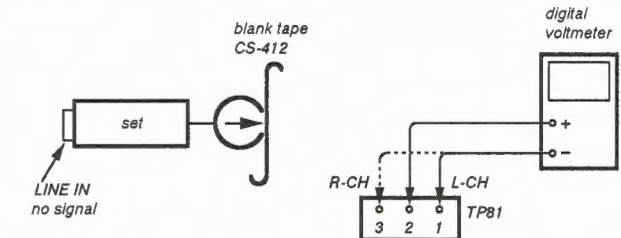
Adjustment Location : AUDIO board

Bias Consumption Current Adjustment

This adjustment should be performed when replacing the head assy or the bias oscillating transformer (T81,T91).

Procedure :

- () : R-CH



- Connect the digital voltmeter to test point TP81.
- Set RV81 (RV91) to mechanical center.
- Set to FWD record mode.
- Adjust T81 (T91) so that the digital voltmeter reading becomes minimum.

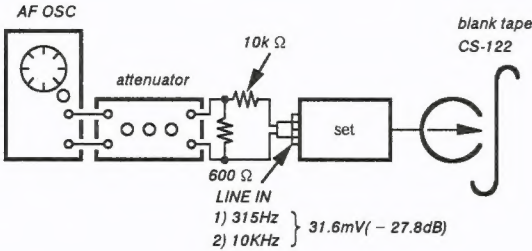
Adjustment Location : AUDIO board

Record Bias Adjustment

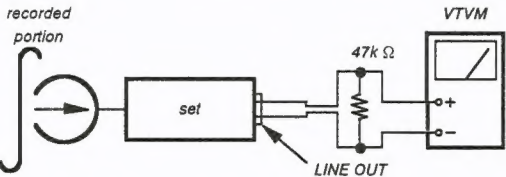
Setting :
REC LEVEL control : standard record position (Refer to page 11.)

Procedure :

1. Record Mode



2. Playback Mode



Confirm that the 10kHz playback output is $0 \pm 0.5\text{dB}$ relative to the 315Hz output. If necessary, adjust RV81(L-CH), RV91(R-CH) and repeat the steps given above.

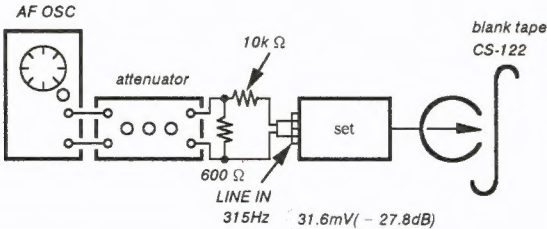
Adjustment Location : AUDIO board

Record Level Adjustment

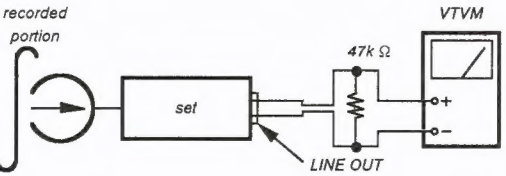
Setting :
REC LEVEL control : standard record position (Refer to page 11.)

Procedure :

1. Record Mode



2. Playback Mode



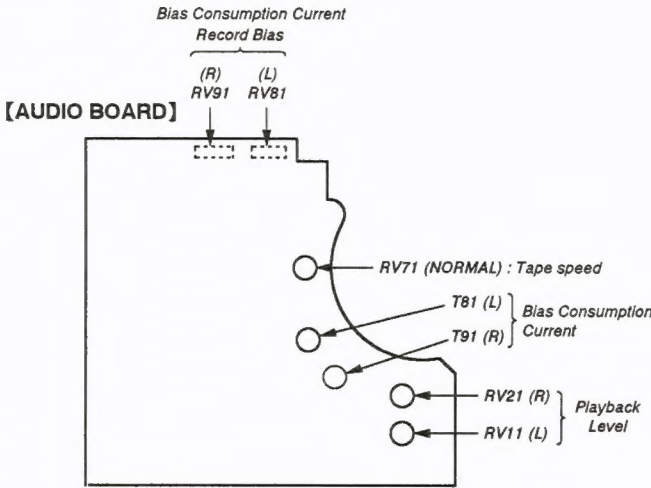
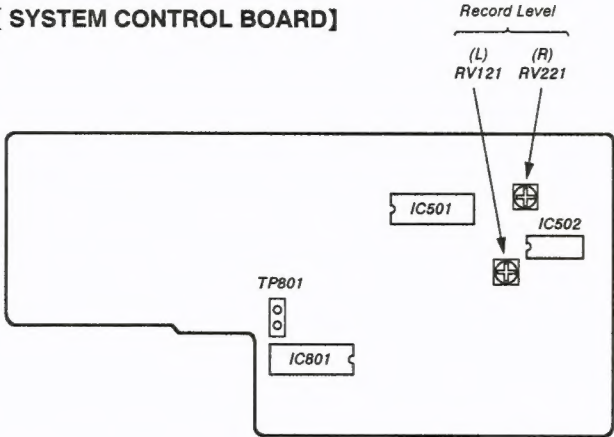
Confirm playback the tape recorded become adjustment level as follows.
If necessary, adjust RV121(L-CH), RV221(R-CH) and repeat the steps 1 and 2.

Adjustment Value :
LINE OUT level : $-26 \pm 0.5\text{dB}$ (36.7 to 41.1mV)

Adjustment Location : SYSTEM CONTROL

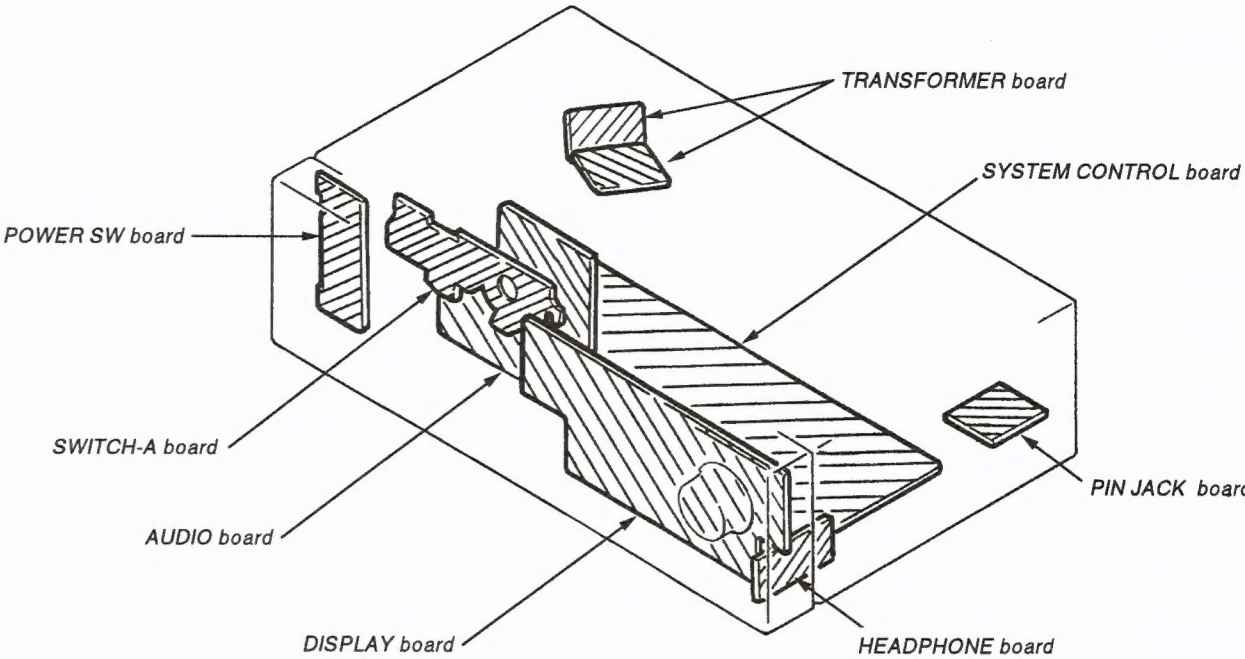
— Adjustment Parts Location Diagrams —

[SYSTEM CONTROL BOARD]

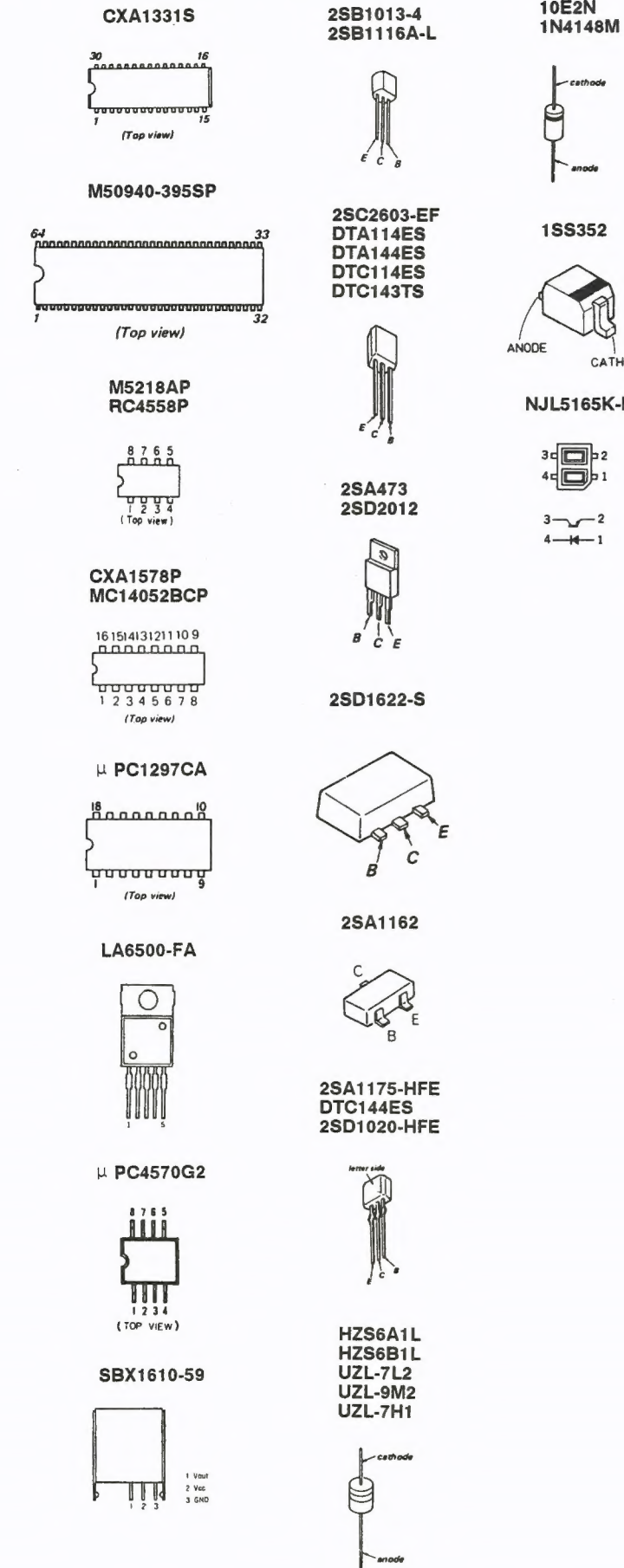


**SECTION 6
DIAGRAMS**

6-1. CIRCUIT BOARDS LOCATION



• Semiconductor Lead Layouts.



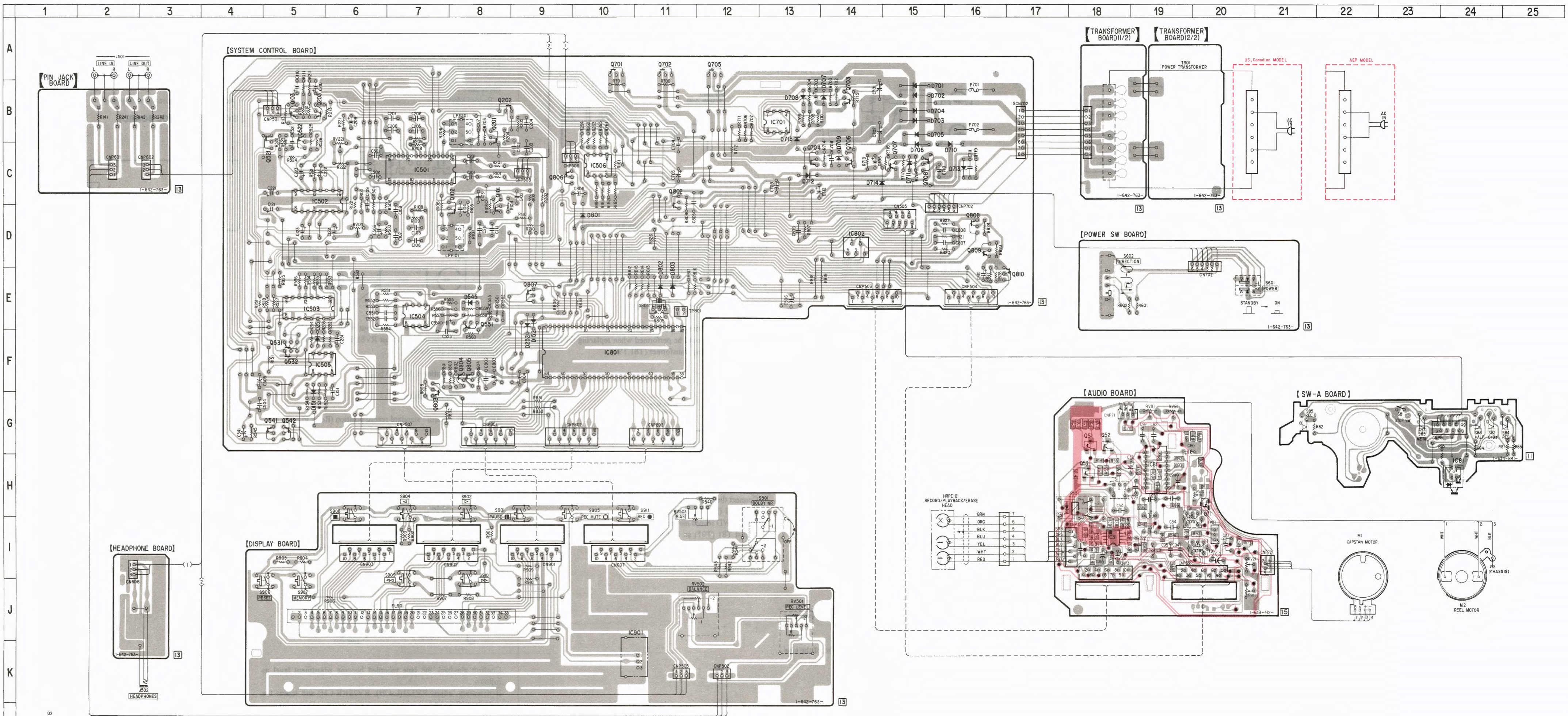
• SEMICONDUCTOR LOCATION

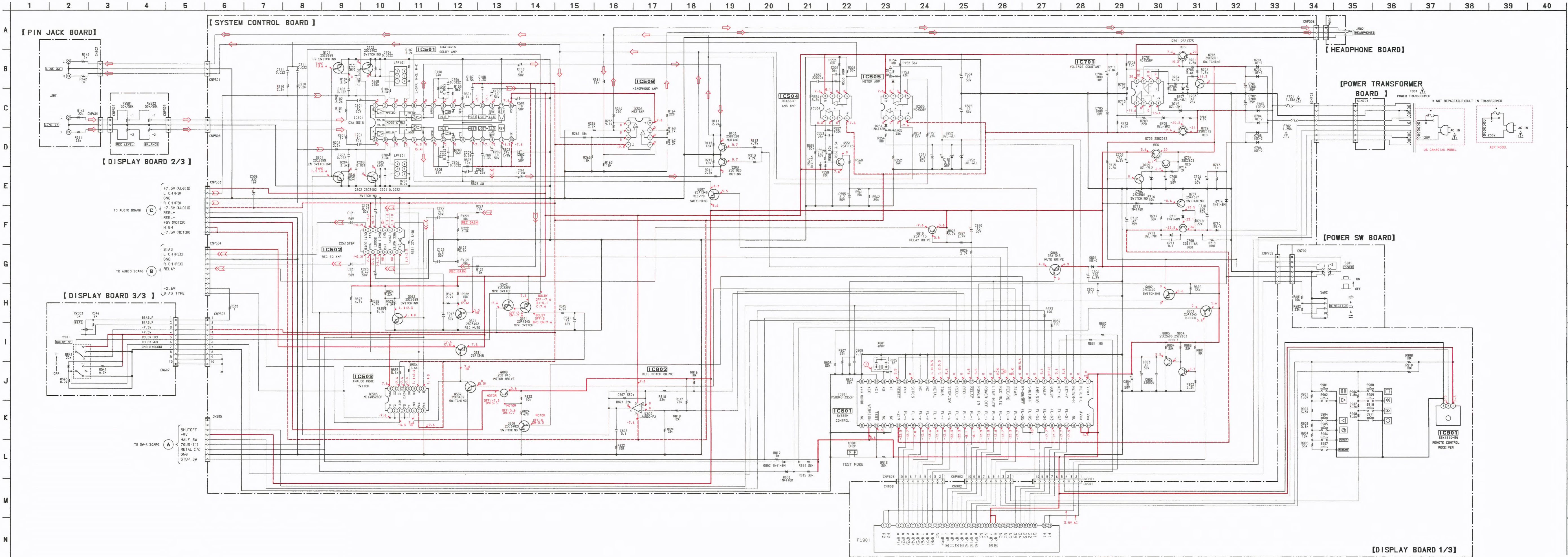
| Ref. No. | Location | Ref. No. | Location |
|----------|----------|----------|----------|
| D31 | H-17 | Q51 | G-18 |
| D151 | G-5 | Q52 | G-18 |
| D152 | E-9 | Q53 | H-18 |
| D251 | F-5 | Q71 | H-20 |
| D252 | E-9 | Q101 | D-8 |
| D545 | E-8 | Q102 | D-8 |
| D701 | B-15 | Q103 | B-5 |
| D702 | B-15 | Q201 | B-8 |
| D703 | B-15 | Q202 | B-8 |
| D704 | B-15 | Q203 | B-5 |
| D705 | B-15 | Q521 | B-5 |
| D706 | C-15 | Q522 | B-5 |
| D707 | B-14 | Q531 | F-5 |
| D708 | B-13 | Q532 | F-5 |
| D709 | C-14 | Q541 | G-5 |
| D710 | C-16 | Q542 | G-5 |
| D711 | B-15 | Q551 | E-8 |
| D712 | C-13 | Q701 | A-10 |
| D713 | C-16 | Q702 | A-11 |
| D714 | C-14 | Q703 | B-14 |
| D715 | B-13 | Q704 | C-13 |
| D801 | D-10 | Q705 | A-12 |
| D802 | E-11 | Q706 | C-14 |
| D803 | E-11 | Q707 | B-15 |
| | | Q708 | B-15 |
| IC31 | I-18 | Q802 | C-11 |
| IC81 | H-19 | Q803 | F-7 |
| | (AUDIO) | Q804 | F-8 |
| IC81 | H-24 | Q805 | F-8 |
| | (SW-A) | Q806 | C-9 |
| IC501 | C-7 | | |
| IC502 | C-5 | Q807 | E-9 |
| | | Q808 | D-16 |
| IC503 | E-5 | Q809 | D-16 |
| IC504 | E-7 | Q810 | E-16 |
| IC505 | F-5 | | |
| IC506 | C-10 | | |
| IC701 | B-13 | | |
| IC801 | F-10 | | |
| IC802 | D-14 | | |
| IC901 | K-11 | | |

Note:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : Through hole.
- ▨ : Pattern on the side which is seen.
- ▨ : Pattern of the rear side.
- : Chip components extracted from the rear side.

6-2. PRINTED WIRING BOARDS





Note :

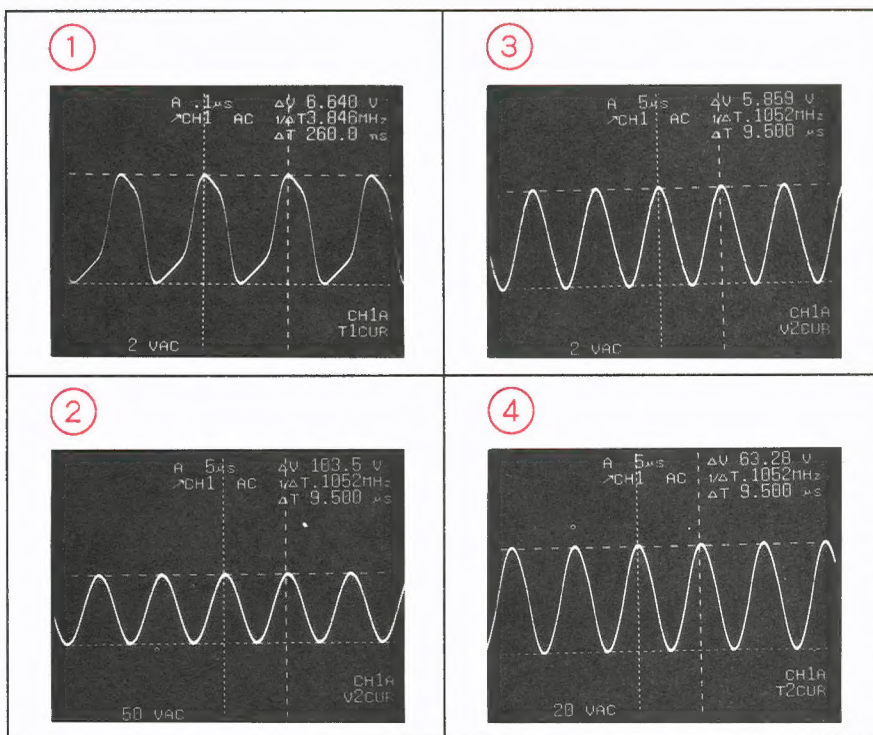
- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4W$ or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.

Note :
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

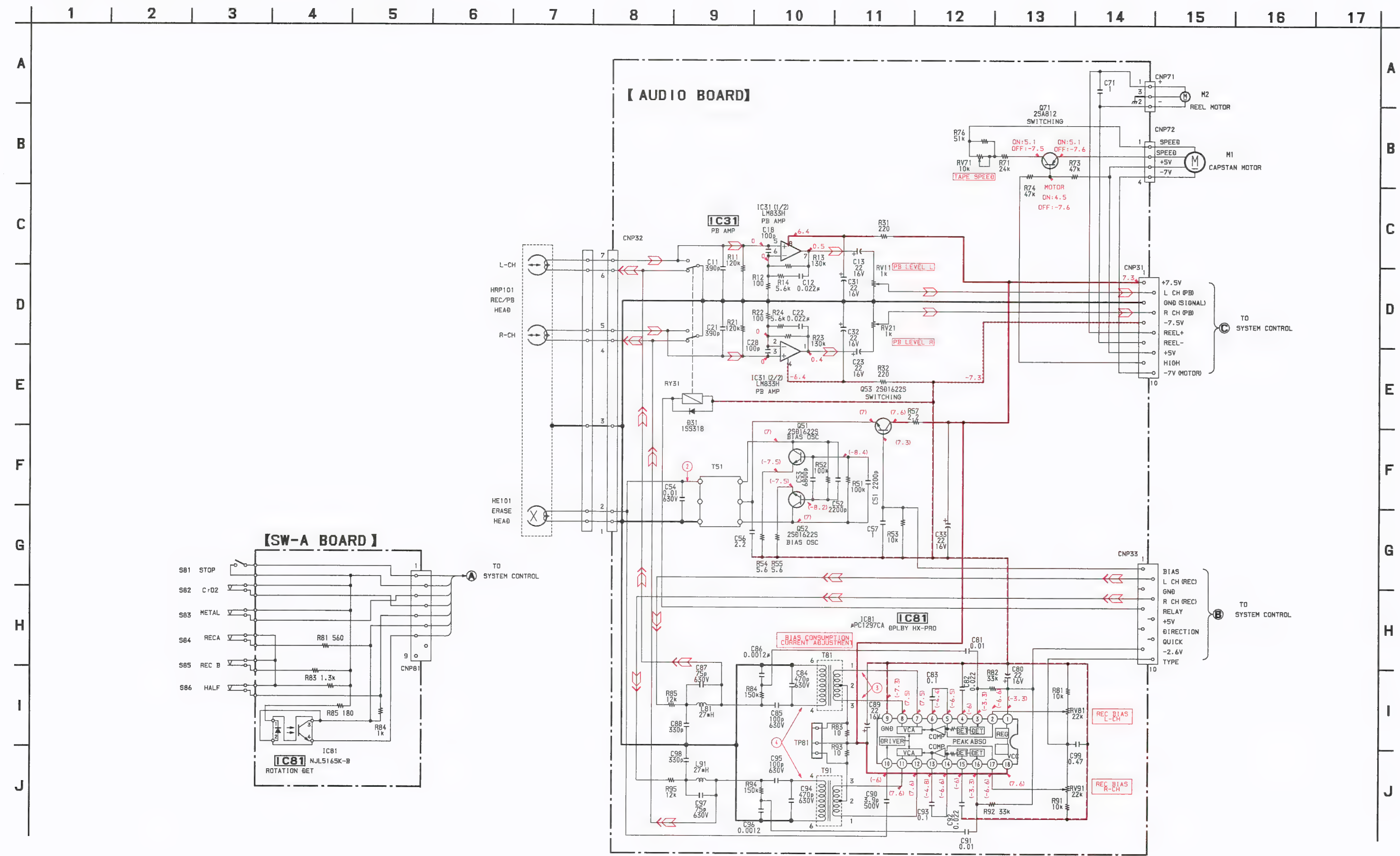
Note :
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- — : B+ Line
- - - - : B- Line
- [] : adjustment for repair.
- ※ : selected to yield optimum performance.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark : STOP
- () : REC
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \Rightarrow : PB
- \Rightarrow : REC

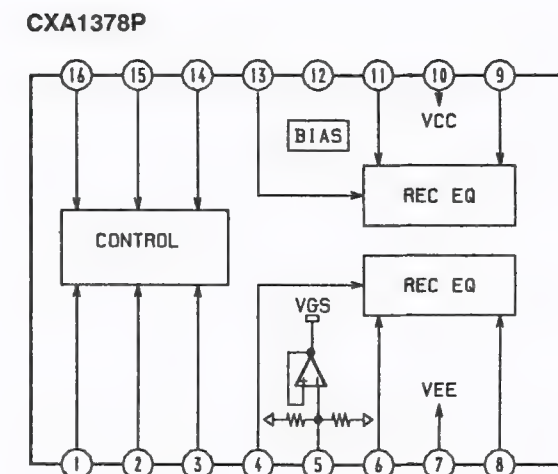
• WAVEFORMS



6-4. SCHEMATIC DIAGRAM (AUDIO SECTION) • Refer to page 23 for note.



• IC BLOCK DIAGRAM






SECTION 7
EXPLODED VIEWS

NOTE:

- XX, -X mean standardized parts, so they may have some differences from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE)....(RED)
Parts color Cabinet's color

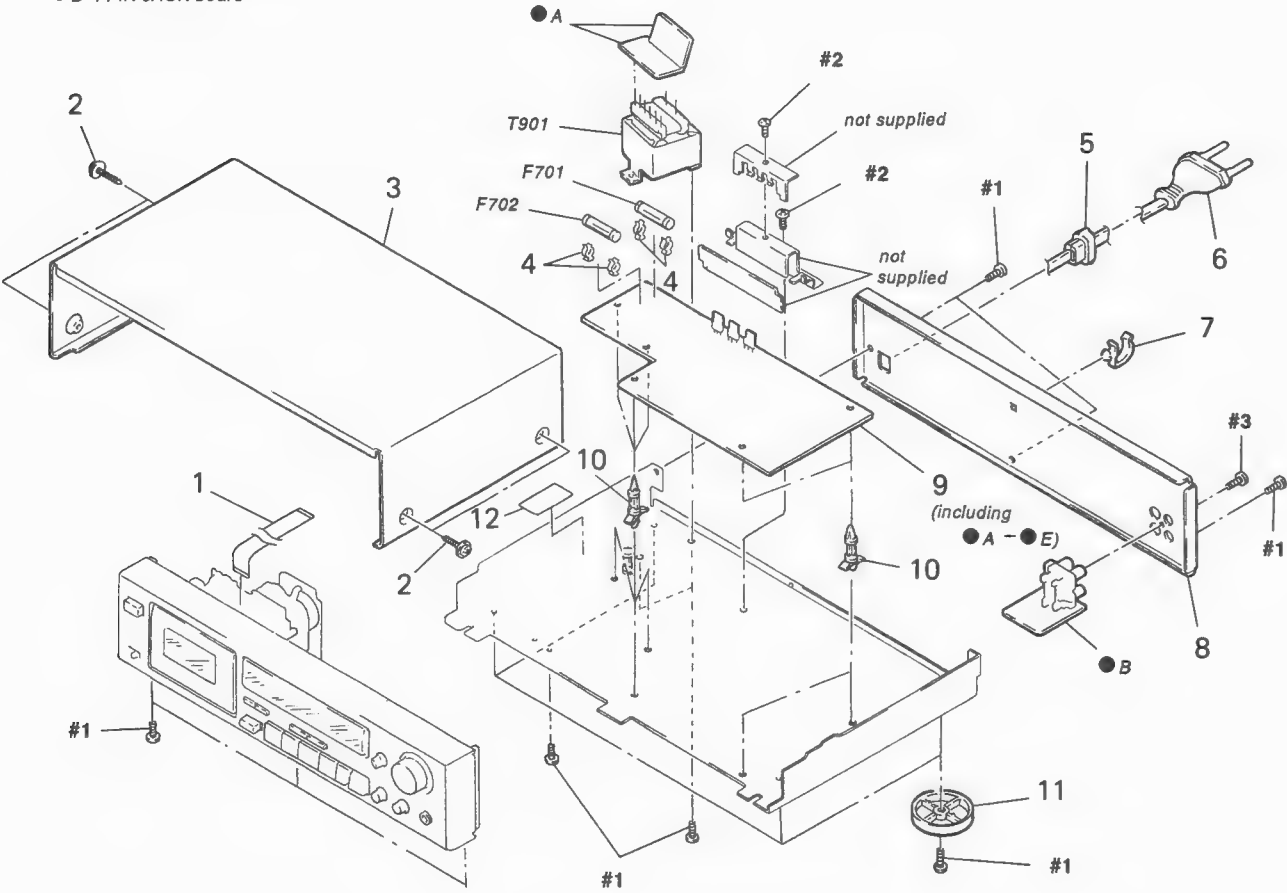
- Items marked "●*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. CHASSIS SECTION

- A : TRANSFORMER board
- B : PIN JACK board

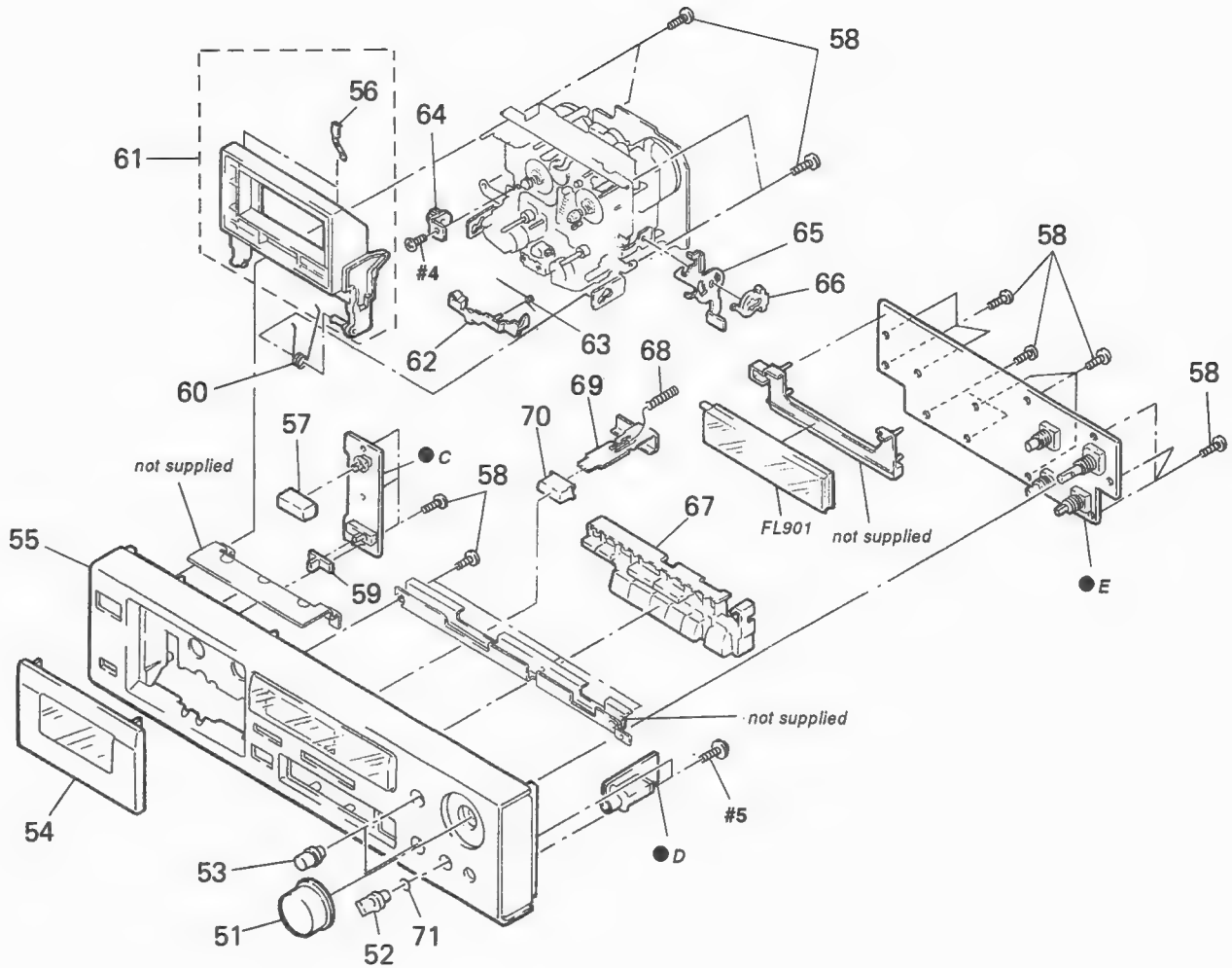


| Ref.No. | Part No. | Description | Remark |
|---------|--------------|--|--------|
| 1 | 1-575-781-11 | WIRE, FLAT TYPE (9 CORE) | |
| 2 | 3-704-366-01 | SCREW (CASE) (M3X8) | |
| 3 | 3-332-578-42 | CASE | |
| * 4 | 1-533-213-31 | HOLDER, FUSE | |
| * 5 | 3-703-244-00 | BUSHING (2104), CORD (AEP) | |
| * 5 | 3-703-571-11 | BUSHING (S) (4516), CORD (US,Canadian) | |
| △ 6 | 1-555-795-00 | CORD, POWER, EULO PLUG (AEP) | |
| △ 6 | 1-558-945-11 | CORD, POWER (POLAR.SPT-1)(US,Canadian) | |
| * 7 | 4-949-235-01 | HOOK | |
| * 8 | 3-377-944-01 | PANEL, BACK (US,Canadian) | |
| * 8 | 3-377-944-11 | PANEL, BACK (AE1) | |
| * 8 | 3-377-944-21 | PANEL, BACK (AE2) | |

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|----------------------------------|--------|
| * 9 | A-2006-786-A | SYSTEM CONTROL BOARD, COMPLETE | |
| * 10 | 3-346-265-11 | HOLDER, PC BOARD | |
| 11 | 4-943-148-32 | FOOT (F58175SW)(US,Canadian) | |
| 11 | 4-943-148-42 | FOOT (F58175SW)(AEP) | |
| * 12 | 3-703-044-26 | LABEL, CAUTION (US,Canadian) | |
| △ F701 | 1-532-285-00 | FUSE, TIME-LAG (AEP) | |
| △ F701 | 1-532-741-11 | FUSE, GLASS TUBE (US,Canadian) | |
| △ F702 | 1-532-285-00 | FUSE, TIME-LAG (AEP) | |
| △ F702 | 1-532-741-11 | FUSE, GLASS TUBE (US,Canadian) | |
| △ T901 | 1-450-750-11 | TRANSFORMER, POWER (AEP) | |
| △ T901 | 1-450-751-11 | TRANSFORMER, POWER (US,Canadian) | |

7-2. FRONT PANEL SECTION

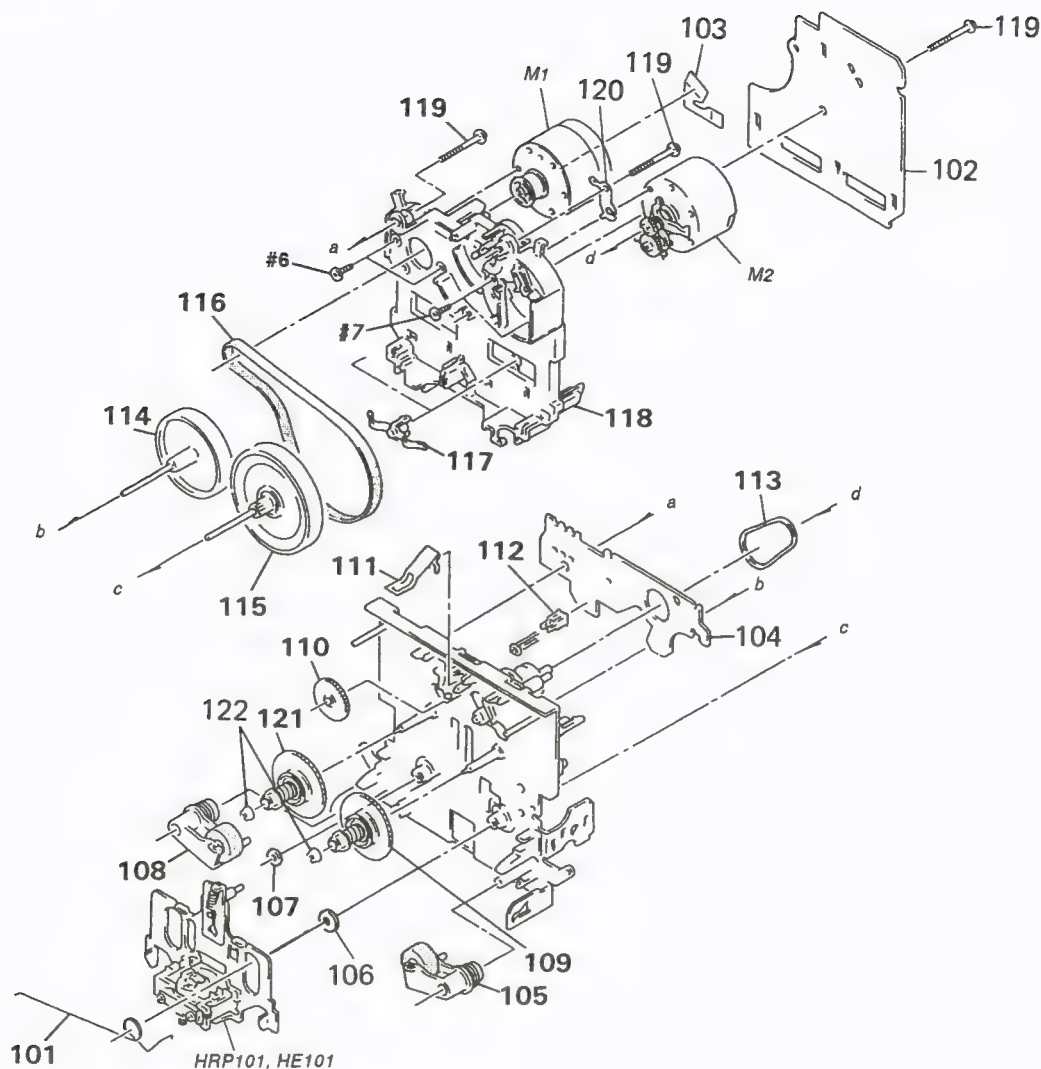
- C : POWER SW board
- D : HEADPHONE board
- E : DISPLAY board



| Ref.No. | Part No. | Description | Remark |
|---------|--------------|---------------------------------|--------|
| 51 | 3-367-438-11 | KNOB (REC) | |
| 52 | 3-380-950-01 | KNOB (VOL) | |
| 53 | 3-367-431-01 | KNOB (BAL) | |
| 54 | X-3365-338-1 | LID (R) ASSY, CASSETTE | |
| 55 | X-3365-337-1 | PANEL ASSY, FRONT (AEP) | |
| 55 | X-3365-339-1 | PANEL ASSY, FRONT (US,Canadian) | |
| 56 | 3-308-823-11 | SPRING | |
| 57 | 4-922-921-01 | BUTTON (POWER) | |
| 58 | 4-951-620-01 | SCREW (2.6X8), +BVTP | |
| 59 | 4-931-421-11 | KNOB (T & S) | |
| 60 | 3-354-960-01 | SPRING (LOADING R), TORSION | |
| 61 | X-3340-195-1 | HOLDER (R) ASSY, CASSETTE (AEP) | |

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|---|--------|
| 61 | X-3365-324-1 | HOLDER (R) ASSY, CASSETTE (US,Canadian) | |
| 62 | 3-354-956-01 | LEVER (EJ SAFTY LEVER R) | |
| 63 | 3-354-962-01 | SPRING (EJ SAFTY SPRING R) | |
| 64 | 3-354-963-01 | DAMPER | |
| * 65 | 3-354-954-01 | LEVER (LOCK LEVER R) | |
| 66 | 3-354-957-01 | JOINT (LOCK LEVER) | |
| 67 | 3-367-434-31 | BUTTON (A) | |
| 68 | 3-359-906-01 | SPRING, COMPRESSION | |
| * 69 | 3-370-068-01 | SLIDER (EJECT) | |
| 70 | 3-370-067-01 | BUTTON (EJECT) | |
| 71 | 3-356-935-01 | SPRING | |
| FL901 | 1-519-713-11 | INDICATOR TUBE, FLUORESCENT | |

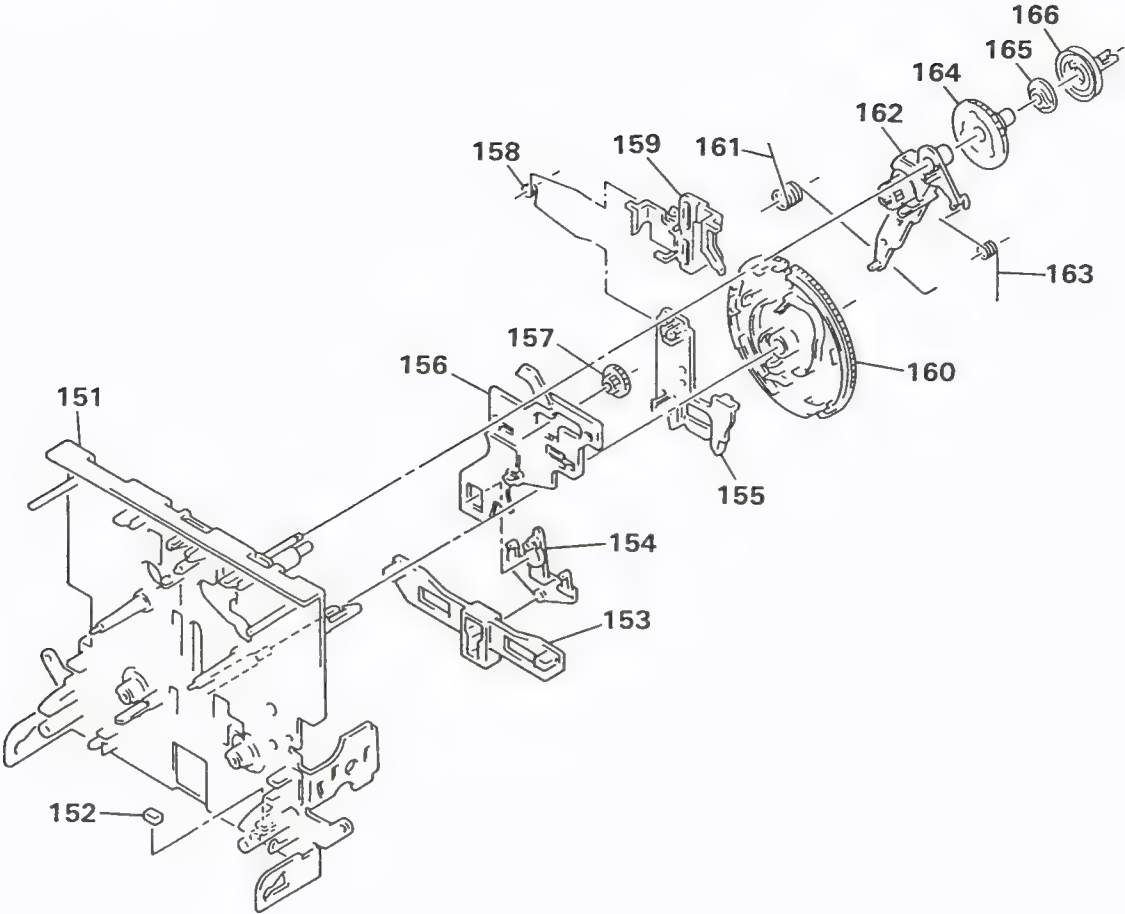
7-3. MECHANISM SECTION 1 (TCM-190RB12CJ)



| Ref.No. | Part No. | Description | Remark |
|---------|--------------|---------------------------------|--------|
| 101 | 3-359-455-01 | SPRING, TORSION | |
| * 102 | A-2006-828-A | AUDIO BOARD, COMPLETE | |
| 103 | 1-638-983-11 | PC BOARD, MOTOR FLEXIBLE | |
| * 104 | 1-634-841-14 | SW-A BOARD | |
| 105 | X-3359-408-1 | LEVER (PINCH LEVER FWD) ASSY | |
| 106 | 3-356-713-01 | WASHER | |
| 107 | 3-356-714-01 | WASHER | |
| 108 | X-3359-409-1 | LEVER (PINCH LEVER REV) ASSY | |
| 109 | X-3359-404-1 | TABLE ASSY, REEL | |
| 110 | 3-359-424-01 | GEAR (REV GEAR) | |
| 111 | 3-359-430-01 | SPRING(CASSETTE RETAINER), LEAF | |

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|---------------------------------|--------|
| 112 | 3-343-419-01 | HOLDER (S SENSER A) | |
| 113 | 3-359-466-01 | BELT (FR), SQUARE | |
| 114 | X-3359-410-1 | FLYWHEEL (REV) ASSY | |
| 115 | X-3364-554-1 | FLYWHEEL (FWD) ASSY | |
| 116 | 3-359-417-01 | BELT (FLAT), CAPSTAN | |
| 117 | 3-575-321-00 | RETAINER, THRUST, CAPSTAN | |
| * 118 | 3-359-436-01 | BASE (THRUST RETAINER), FITTING | |
| 119 | 3-359-414-01 | SCREW (+PTPH 2X23) | |
| 120 | 3-359-450-01 | PLATE, GROUND | |
| 121 | X-3362-078-1 | TABLE ASSY (B), REEL | |
| 122 | 3-362-308-01 | CAP (REEL) | |
| HE101 | A-2003-838-A | BASE ASSY, HEAD (ERASE) | |
| HRP101 | A-2003-838-A | BASE ASSY, HEAD (PB/REC) | |
| M1 | X-3359-417-1 | MOTOR ASSY, CAPSTAN | |
| M2 | X-3363-501-1 | MOTOR ASSY, REEL | |

7-4. MECHANISM SECTION 2
(TCM-190RB12CJ)



| Ref.No. | Part No. | Description | Remark |
|---------|--------------|--------------------------|--------|
| 151 | X-3359-415-1 | CHASSIS ASSY, MECHANICAL | |
| 152 | 3-359-469-01 | SPACER | |
| * 153 | 3-359-425-01 | SLIDER (REVERSE SLIDER) | |
| 154 | 3-359-426-01 | LEVER (REVERSE LEVER) | |
| * 155 | 3-359-427-01 | SLIDER (LEVERSE SLIDER) | |
| * 156 | 3-359-415-01 | SLIDER,(TRIGGER SLIDER) | |
| 157 | 3-359-448-01 | GEAR (TRIGGER) | |
| 158 | 3-359-454-01 | SPRING, TORSION | |
| 159 | 3-359-429-01 | SLIDER (BRAKE PLATE) | |

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|--------------------------------|--------|
| 160 | 3-359-420-01 | GEAR (CAM GEAR) | |
| 161 | 3-359-456-01 | SPRING(TRIGGER SPRING),TORSION | |
| 162 | X-3359-405-1 | LEVER (FR ARM) ASSY | |
| 163 | 3-359-453-01 | SPRING (FR ARM), TORSION | |
| 164 | 3-359-419-01 | GEAR (FR GEAR) | |
| 165 | 3-359-421-01 | CLUTCH (REEL DISK) | |
| 166 | 3-359-418-01 | PULLEY (FR PULLEY) | |

SECTION 8 ELECTRICAL PARTS LIST

AUDIO

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- **RESISTORS**
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal oxide-film resistor
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- **SEMICONDUCTORS**
In each case, u: μ , for example:
uA.....: μ A....., uPA.....: μ PA.....
uPB.....: μ PB....., uPC.....: μ PC.....
uPD.....: μ PD.....
- **CAPACITORS**
uF: μ F
- **COILS**
uH: μ H

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

| Ref.No. | Part No. | Description | Remark | | | |
|---------|--------------|-----------------------|----------|-----|------|--|
| * | A-2006-828-A | AUDIO BOARD, COMPLETE | ***** | | | |
| | | < CAPACITOR > | | | | |
| C11 | 1-163-131-00 | CERAMIC CHIP | 390PF | 5% | 50V | |
| C12 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C13 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C18 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C21 | 1-163-131-00 | CERAMIC CHIP | 390PF | 5% | 50V | |
| C22 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C23 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C28 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C31 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C32 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C33 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C51 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V | |
| C52 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V | |
| C53 | 1-163-019-00 | CERAMIC CHIP | 0.0068uF | 10% | 50V | |
| C54 | 1-136-601-11 | FILM | 0.01uF | 5% | 630V | |
| C56 | 1-164-505-11 | CERAMIC CHIP | 2.2uF | | 16V | |
| C57 | 1-164-346-11 | CERAMIC CHIP | 1uF | | 16V | |
| C71 | 1-164-346-11 | CERAMIC CHIP | 1uF | | 16V | |
| C80 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C81 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C82 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C83 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C84 | 1-136-478-11 | FILM | 470PF | 5% | 630V | |
| C85 | 1-136-433-11 | FILM | 100PF | 5% | 630V | |
| C86 | 1-163-143-00 | CERAMIC CHIP | 0.0012uF | 5% | 50V | |
| C87 | 1-136-273-91 | FILM | 75PF | 5% | 630V | |
| C88 | 1-163-003-11 | CERAMIC CHIP | 330PF | 10% | 50V | |
| C89 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C90 | 1-107-045-00 | MICA | 3.9PF | | 500V | |
| C91 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |

| Ref.No. | Part No. | Description | Remark | | |
|----------------|--------------|--------------------------------|-----------|-----|------|
| C92 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V |
| C93 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C94 | 1-136-478-11 | FILM | 470PF | 5% | 630V |
| C95 | 1-136-433-11 | FILM | 100PF | 5% | 630V |
| C96 | 1-163-143-00 | CERAMIC CHIP | 0.0012uF | 5% | 50V |
| C97 | 1-136-273-91 | FILM | 75PF | 5% | 630V |
| C98 | 1-163-003-11 | CERAMIC CHIP | 330PF | 10% | 50V |
| C99 | 1-164-005-11 | CERAMIC CHIP | 0.47uF | | 25V |
| < CONNECTOR > | | | | | |
| * CNP31 | 1-580-782-11 | CONNECTOR, BOARD TO BOARD | | | |
| * CNP32 | 1-580-781-11 | PIN, CONNECTOR (PC BOARD) 7P | | | |
| * CNP33 | 1-580-782-11 | CONNECTOR, BOARD TO BOARD | | | |
| * CNP71 | 1-564-719-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | |
| * CNP72 | 1-580-411-11 | SOCKET, CONNECTOR 4P | | | |
| * CNP75 | 1-564-718-11 | PIN, CONNECTOR (SMALL TYPE) 2P | | | |
| < DIODE > | | | | | |
| D31 | 8-719-016-74 | DIODE | 1SS352 | | |
| < IC > | | | | | |
| IC31 | 8-759-106-02 | IC | uPC4570G2 | | |
| IC81 | 8-759-106-56 | IC | uPC1297CA | | |
| < COIL > | | | | | |
| L81 | 1-410-780-11 | INDUCTOR | 27mH | | |
| L91 | 1-410-780-11 | INDUCTOR | 27mH | | |
| < TRANSISTOR > | | | | | |
| Q51 | 8-729-808-01 | TRANSISTOR | 2SD1622-S | | |
| Q52 | 8-729-808-01 | TRANSISTOR | 2SD1622-S | | |
| Q53 | 8-729-808-01 | TRANSISTOR | 2SD1622-S | | |
| Q71 | 8-729-216-22 | TRANSISTOR | 2SA1162 | | |

AUDIO

SW-A

SYSTEM CONTROL

| Ref.No. | Part No. | Description | Remark | | |
|-----------------------|--------------|-----------------------------------|--------|----|-------|
| < RESISTOR > | | | | | |
| R11 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W |
| R12 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R13 | 1-216-100-00 | METAL GLAZE | 130K | 5% | 1/10W |
| R14 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W |
| R21 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W |
| | | | | | |
| R22 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R23 | 1-216-100-00 | METAL GLAZE | 130K | 5% | 1/10W |
| R24 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W |
| R31 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R32 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| | | | | | |
| R51 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R52 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R53 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R54 | 1-216-309-00 | METAL CHIP | 5.6 | 5% | 1/10W |
| R55 | 1-216-309-00 | METAL CHIP | 5.6 | 5% | 1/10W |
| | | | | | |
| R57 | 1-216-298-00 | METAL CHIP | 2.2 | 5% | 1/10W |
| R71 | 1-216-082-00 | METAL GLAZE | 24K | 5% | 1/10W |
| R72 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W |
| R73 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R74 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| | | | | | |
| R76 | 1-216-090-00 | METAL CHIP | 51K | 5% | 1/10W |
| R81 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R82 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W |
| R83 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W |
| R84 | 1-216-101-00 | METAL CHIP | 150K | 5% | 1/10W |
| | | | | | |
| R85 | 1-216-075-00 | METAL CHIP | 12K | 5% | 1/10W |
| R91 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R92 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W |
| R93 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W |
| R94 | 1-216-101-00 | METAL CHIP | 150K | 5% | 1/10W |
| | | | | | |
| R95 | 1-216-075-00 | METAL CHIP | 12K | 5% | 1/10W |
| < VARIABLE RESISTOR > | | | | | |
| RV11 | 1-241-627-11 | RES, ADJ, CARBON 1K (PB LEVEL) | | | |
| RV21 | 1-241-627-11 | RES, ADJ, CARBON 1K (PB LEVEL) | | | |
| RV71 | 1-241-630-11 | RES, ADJ, CARBON 10K (TAPE SPEED) | | | |
| RV72 | 1-241-630-11 | RES, ADJ, CARBON 10K (TAPE SPERD) | | | |
| RV81 | 1-241-122-11 | RES, ADJ, CARBON 22K (REC BIAS) | | | |
| | | | | | |
| RV91 | 1-241-122-11 | RES, ADJ, CARBON 22K (REC BIAS) | | | |
| < RELAY > | | | | | |
| RY31 | 1-515-803-11 | RELAY | | | |
| < TRANSFORMER > | | | | | |
| T51 | 1-406-417-11 | COIL, BIAS OSCILLATION | | | |
| T81 | 1-433-381-11 | TRANSFORMER, BIAS OSCILLATOR | | | |

| Ref.No. | Part No. | Description | Remark | | |
|---------------|--------------|--------------------------------|----------|-----|------|
| T91 | 1-433-381-11 | TRANSFORMER, BIAS OSCILLATOR | | | |
| < CONNECTOR > | | | | | |
| * TP81 | 1-568-449-11 | HOUSING, CONNECTOR(PC BOARD)3P | | | |
| ***** | | | | | |
| * | 1-634-841-14 | SW-A BOARD | | | |
| ***** | | | | | |
| | 3-343-419-01 | HOLDER (S SENSER A) | | | |
| < CONNECTOR > | | | | | |
| * CNP81 | 1-568-852-11 | SOCKET, CONNECTOR 9P | | | |
| < IC > | | | | | |
| IC81 | 8-719-710-03 | DIODE NJL5165K-B | | | |
| < RESISTOR > | | | | | |
| R81 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R82 | 1-247-818-11 | CARBON | 300 | 5% | 1/4W |
| R83 | 1-247-834-11 | CARBON | 1.3K | 5% | 1/4W |
| R84 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R85 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| < SWITCH > | | | | | |
| S81 | 1-571-958-11 | SWITCH, PUSH (1 KEY)(STOP) | | | |
| S82 | 1-571-281-21 | SWITCH, LEAF (CrO2) | | | |
| S83 | 1-571-281-21 | SWITCH, LEAF (METAL) | | | |
| S84 | 1-571-281-21 | SWITCH, LEAF (REC A) | | | |
| S85 | 1-571-281-21 | SWITCH, LEAF (REC B) | | | |
| S86 | 1-571-281-21 | SWITCH, LEAF (HALF) | | | |
| ***** | | | | | |
| * | A-2006-786-A | SYSTEM CONTROL BOARD, COMPLETE | | | |
| ***** | | | | | |
| * | 1-533-213-31 | HOLDER, FUSE | | | |
| * | 1-562-327-00 | SOCKET, CONNECTOR 3P | | | |
| < CAPACITOR > | | | | | |
| C101 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |
| C102 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V |
| C103 | 1-130-471-00 | MYLAR | 0.001uF | 5% | 50V |
| C104 | 1-130-475-00 | MYLAR | 0.0022uF | 5% | 50V |
| C105 | 1-130-475-00 | MYLAR | 0.0022uF | 5% | 50V |
| C106 | 1-130-475-00 | MYLAR | 0.0022uF | 5% | 50V |
| C107 | 1-136-174-00 | FILM | 0.56uF | 5% | 50V |
| C108 | 1-136-171-00 | FILM | 0.33uF | 5% | 50V |
| C109 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |
| C110 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |

SYSTEM CONTROL

| Ref.No. | Part No. | Description | Remark | | | |
|---------|--------------|-------------|----------|-----|------|--|
| C111 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C121 | 1-124-903-11 | ELECT | 1uF | 20% | 50V | |
| C122 | 1-123-382-00 | ELECT | 3.3uF | 20% | 100V | |
| C123 | 1-124-465-00 | ELECT | 0.47uF | 20% | 50V | |
| C151 | 1-123-382-00 | ELECT | 3.3uF | 20% | 100V | |
| C201 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C202 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C203 | 1-130-471-00 | MYLAR | 0.001uF | 5% | 50V | |
| C204 | 1-130-475-00 | MYLAR | 0.0022uF | 5% | 50V | |
| C205 | 1-130-475-00 | MYLAR | 0.0022uF | 5% | 50V | |
| C206 | 1-130-475-00 | MYLAR | 0.0022uF | 5% | 50V | |
| C207 | 1-136-174-00 | FILM | 0.56uF | 5% | 50V | |
| C208 | 1-136-171-00 | FILM | 0.33uF | 5% | 50V | |
| C209 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C210 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C211 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C221 | 1-124-903-11 | ELECT | 1uF | 20% | 50V | |
| C222 | 1-123-382-00 | ELECT | 3.3uF | 20% | 100V | |
| C223 | 1-124-465-00 | ELECT | 0.47uF | 20% | 50V | |
| C251 | 1-123-382-00 | ELECT | 3.3uF | 20% | 100V | |
| C501 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C502 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C503 | 1-126-233-11 | ELECT | 22uF | 20% | 50V | |
| C504 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C505 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C521 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C541 | 1-124-034-51 | ELECT | 33uF | 20% | 16V | |
| C551 | 1-162-217-31 | CERAMIC | 56PF | 5% | 50V | |
| C552 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V | |
| C553 | 1-162-217-31 | CERAMIC | 56PF | 5% | 50V | |
| C554 | 1-124-925-11 | ELECT | 2.2uF | 20% | 100V | |
| C555 | 1-124-925-11 | ELECT | 2.2uF | 20% | 100V | |
| C701 | 1-124-563-11 | ELECT | 2200uF | 20% | 25V | |
| C702 | 1-124-563-11 | ELECT | 2200uF | 20% | 25V | |
| C703 | 1-124-477-11 | ELECT | 47uF | 20% | 25V | |
| C704 | 1-124-473-11 | ELECT | 1000uF | 20% | 10V | |
| C705 | 1-124-473-11 | ELECT | 1000uF | 20% | 10V | |
| C706 | 1-124-927-11 | ELECT | 4.7uF | 20% | 100V | |
| C708 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C709 | 1-124-472-11 | ELECT | 470uF | 20% | 10V | |
| C710 | 1-124-122-11 | ELECT | 100uF | 20% | 50V | |
| C711 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C712 | 1-124-910-11 | ELECT | 47uF | 20% | 50V | |
| C802 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V | |
| C803 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C804 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C805 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C806 | 1-126-176-11 | ELECT | 220uF | 20% | 10V | |
| C807 | 1-162-288-31 | CERAMIC | 330PF | 10% | 50V | |

| Ref.No. | Part No. | Description | Remark | | | |
|---------|--------------|-------------|--------|-----|-----|--|
| C808 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C809 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C810 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |

< CONNECTOR >

| | | | | | | |
|----------|--------------|--------------------------------|--|--|--|--|
| * CN505 | 1-568-828-11 | SOCKET, CONNECTOR 9P | | | | |
| * CN607 | 1-580-782-11 | CONNECTOR, BOARD TO BOARD | | | | |
| * CN901 | 1-580-782-11 | CONNECTOR, BOARD TO BOARD | | | | |
| * CN902 | 1-580-782-11 | CONNECTOR, BOARD TO BOARD | | | | |
| * CN903 | 1-580-782-11 | CONNECTOR, BOARD TO BOARD | | | | |
| * CNP501 | 1-564-337-00 | PIN, CONNECTOR 3P | | | | |
| * CNP502 | 1-564-705-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | | |
| * CNP503 | 1-691-916-11 | CONNECTOR, BOARD TO BOARD | | | | |
| * CNP504 | 1-691-916-11 | CONNECTOR, BOARD TO BOARD | | | | |
| * CNP505 | 1-564-705-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | | |
| * CNP506 | 1-564-337-61 | PIN, CONNECTOR 3P | | | | |
| * CNP507 | 1-580-784-11 | CONNECTOR, BOARD TO BOARD | | | | |
| * CNP508 | 1-564-705-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | | |
| * CNP601 | 1-564-705-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | | |
| * CNP702 | 1-564-340-00 | PIN, CONNECTOR 6P | | | | |
| * CNP801 | 1-580-784-11 | CONNECTOR, BOARD TO BOARD | | | | |
| * CNP802 | 1-580-784-11 | CONNECTOR, BOARD TO BOARD | | | | |
| * CNP803 | 1-580-784-11 | CONNECTOR, BOARD TO BOARD | | | | |

< DIODE >

| | | | | | | |
|------|--------------|-------|---------|--|--|--|
| D151 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D152 | 8-719-933-33 | DIODE | HZS6A1L | | | |
| D251 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D252 | 8-719-933-33 | DIODE | HZS6A1L | | | |
| D545 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D701 | 8-719-200-77 | DIODE | 10E2N | | | |
| D702 | 8-719-200-77 | DIODE | 10E2N | | | |
| D703 | 8-719-200-77 | DIODE | 10E2N | | | |
| D704 | 8-719-200-77 | DIODE | 10E2N | | | |
| D705 | 8-719-200-77 | DIODE | 10E2N | | | |
| D706 | 8-719-200-77 | DIODE | 10E2N | | | |
| D707 | 8-719-933-33 | DIODE | HZS6A1L | | | |
| D708 | 8-719-001-15 | DIODE | UZL-9M2 | | | |
| D709 | 8-719-000-78 | DIODE | UZL-7L2 | | | |
| D710 | 8-719-200-77 | DIODE | 10E2N | | | |
| D711 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D712 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D713 | 8-719-000-93 | DIODE | UZL-7H1 | | | |
| D714 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D715 | 8-719-933-36 | DIODE | HZS6B1L | | | |
| D801 | 8-719-200-77 | DIODE | 10E2N | | | |
| D802 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D803 | 8-719-987-63 | DIODE | 1N4148M | | | |

SYSTEM CONTROL

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|-------------------------------|--------|
| | | < INDICATOR TUBE > | |
| FL901 | 1-519-713-11 | INDICATOR TUBE, FLUORESCENT | |
| | | < IC > | |
| IC501 | 8-752-059-55 | IC CXA1331S | |
| IC502 | 8-752-055-61 | IC CXA1578P | |
| IC503 | 8-759-000-48 | IC MC14052BCP | |
| IC504 | 8-759-945-58 | IC RC4558P | |
| IC505 | 8-759-945-58 | IC RC4558P | |
| IC506 | 8-759-634-51 | IC M5218AP | |
| IC701 | 8-759-945-58 | IC RC4558P | |
| IC801 | 8-759-065-44 | IC M50940-395SP | |
| IC802 | 8-759-803-42 | IC LA6500-FA | |
| IC901 | 8-741-100-48 | IC SBX1610-59 | |
| | | < JACK > | |
| J501 | 1-565-258-11 | JACK, PIN 4P (LINE IN/OUT) | |
| J502 | 1-568-519-41 | JACK, LARGE TYPE (HEADPHONES) | |
| | | < FILTER > | |
| LPF101 | 1-231-388-00 | FILTER, LOW PASS | |
| LPF201 | 1-231-388-00 | FILTER, LOW PASS | |
| | | < TRANSISTOR > | |
| Q101 | 8-729-900-89 | TRANSISTOR DTC144ES | |
| Q102 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q103 | 8-729-142-25 | TRANSISTOR 2SD1020-HFE | |
| Q201 | 8-729-900-89 | TRANSISTOR DTC144ES | |
| Q202 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q203 | 8-729-142-25 | TRANSISTOR 2SD1020-HFE | |
| Q521 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q522 | 8-729-900-89 | TRANSISTOR DTC144ES | |
| Q531 | 8-729-900-61 | TRANSISTOR DTA114ES | |
| Q532 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q541 | 8-729-900-65 | TRANSISTOR DTA144ES | |
| Q542 | 8-729-900-89 | TRANSISTOR DTC144ES | |
| Q551 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| Q701 | 8-729-141-83 | TRANSISTOR 2SA473 | |
| Q702 | 8-729-209-15 | TRANSISTOR 2SD2012 | |
| Q703 | 8-729-900-74 | TRANSISTOR DTC143TS | |
| Q704 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q705 | 8-729-209-15 | TRANSISTOR 2SD2012 | |
| Q706 | 8-729-900-74 | TRANSISTOR DTC143TS | |
| Q707 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| Q708 | 8-729-140-04 | TRANSISTOR 2SB1116A-L | |
| Q802 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q803 | 8-729-900-65 | TRANSISTOR DTA144ES | |
| Q804 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |

| Ref.No. | Part No. | Description | Remark |
|---------|--------------|------------------------|--------|
| Q805 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q806 | 8-729-900-65 | TRANSISTOR DTA144ES | |
| Q807 | 8-729-900-61 | TRANSISTOR DTA114ES | |
| Q808 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q809 | 8-729-801-84 | TRANSISTOR 2SB1013-4 | |
| Q810 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| | | < RESISTOR > | |
| R101 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R102 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R103 | 1-247-887-00 | CARBON 220K 5% 1/4W | |
| R104 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R105 | 1-247-887-00 | CARBON 220K 5% 1/4W | |
| R106 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R107 | 1-249-428-11 | CARBON 8.2K 5% 1/4W | |
| R108 | 1-247-864-11 | CARBON 24K 5% 1/4W | |
| R109 | 1-249-414-11 | CARBON 560 5% 1/4W | |
| R110 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R111 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R112 | 1-249-432-11 | CARBON 18K 5% 1/4W | |
| R113 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R121 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R122 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R141 | 1-249-433-11 | CARBON 22K 5% 1/4W | |
| R142 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R151 | 1-249-434-11 | CARBON 27K 5% 1/4W | |
| R152 | 1-247-868-11 | CARBON 36K 5% 1/4W | |
| R153 | 1-247-870-11 | CARBON 43K 5% 1/4W | |
| R154 | 1-249-408-11 | CARBON 180 5% 1/4W | |
| R161 | 1-249-432-11 | CARBON 18K 5% 1/4W | |
| R162 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R163 | 1-247-854-11 | CARBON 9.1K 5% 1/4W | |
| R164 | 1-249-409-11 | CARBON 220 5% 1/4W | |
| R165 | 1-249-432-11 | CARBON 18K 5% 1/4W | |
| R201 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R202 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R203 | 1-247-887-00 | CARBON 220K 5% 1/4W | |
| R204 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R205 | 1-247-887-00 | CARBON 220K 5% 1/4W | |
| R206 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R207 | 1-249-428-11 | CARBON 8.2K 5% 1/4W | |
| R208 | 1-247-864-11 | CARBON 24K 5% 1/4W | |
| R209 | 1-249-414-11 | CARBON 560 5% 1/4W | |
| R210 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R211 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R212 | 1-249-432-11 | CARBON 18K 5% 1/4W | |
| R213 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R221 | 1-249-429-11 | CARBON 10K 5% 1/4W | |

SYSTEM CONTROL

| Ref.No. | Part No. | Description | Remark | | |
|---------|--------------|-------------|--------|----|------|
| R222 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W |
| R241 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R242 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R251 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W |
| R252 | 1-247-868-11 | CARBON | 36K | 5% | 1/4W |
| R253 | 1-247-870-11 | CARBON | 43K | 5% | 1/4W |
| R254 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R261 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R262 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R263 | 1-247-854-11 | CARBON | 9.1K | 5% | 1/4W |
| R264 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R265 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R501 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R502 | 1-215-455-00 | METAL | 27K | 1% | 1/6W |
| R503 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R521 | 1-215-455-00 | METAL | 27K | 1% | 1/6W |
| R522 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R523 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R524 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R525 | 1-247-854-11 | CARBON | 9.1K | 5% | 1/4W |
| R526 | 1-247-846-11 | CARBON | 4.3K | 5% | 1/4W |
| R527 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R528 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R532 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R534 | 1-247-836-11 | CARBON | 1.6K | 5% | 1/4W |
| R535 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R541 | 1-247-850-11 | CARBON | 6.2K | 5% | 1/4W |
| R542 | 1-247-862-11 | CARBON | 20K | 5% | 1/4W |
| R543 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| R545 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R546 | 1-247-838-00 | CARBON | 2K | 5% | 1/4W |
| R551 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R552 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R553 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R554 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| R555 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R556 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W |
| R557 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R558 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R559 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R560 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R561 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R562 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W |
| R601 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R602 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R701 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R702 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W |
| R703 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R704 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |

| Ref.No. | Part No. | Description | Remark | | |
|---------|--------------|-------------|--------|----|------|
| R705 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R706 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R707 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R708 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R709 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R710 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R711 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R712 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R713 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R714 | 1-247-838-00 | CARBON | 2K | 5% | 1/4W |
| R715 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R716 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R717 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W |
| R718 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R719 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R801 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R802 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W |
| R803 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R804 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R805 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W |
| R806 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R807 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R808 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R809 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R812 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R813 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R814 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R815 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R816 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R817 | 1-247-862-11 | CARBON | 20K | 5% | 1/4W |
| R818 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R819 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W |
| R820 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R821 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R822 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R823 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R824 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R825 | 1-249-403-11 | CARBON | 68 | 5% | 1/4W |
| R826 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R827 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R828 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R830 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R831 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R832 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R833 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R901 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W |
| R902 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W |
| R903 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R904 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |

SYSTEM CONTROL

| Ref.No. | Part No. | Description | Remark | | |
|---------|--------------|-------------|--------|----|------|
| R905 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R906 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W |
| R907 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W |
| R908 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R909 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R910 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |

< VARIABLE RESISTOR >

| | | |
|-------|--------------|--------------------------------------|
| RV121 | 1-238-600-11 | RES, ADJ, CARBON 10K (REC GAIN) |
| RV221 | 1-238-600-11 | RES, ADJ, CARBON 10K (REC GAIN) |
| RV501 | 1-241-820-11 | RES, VAR, CARBON 50K/50K (REC LEVEL) |
| RV502 | 1-241-821-11 | RES, VAR, CARBON 50K/50K (BALANCE) |
| RV503 | 1-241-822-11 | RES, VAR, CARBON 5K (BIAS) |

< SWITCH >

| | | |
|------|--------------|------------------------------|
| S501 | 1-692-063-11 | SWITCH, ROTARY (DOLBY NR) |
| S601 | 1-554-118-00 | SWITCH, PUSH (1 KEY) (POWER) |
| S602 | 1-571-520-11 | SWITCH, SLIDE (DIRECTION) |
| S901 | 1-554-303-21 | SWITCH, TACTILE (PAUSE) |
| S902 | 1-554-303-21 | SWITCH, TACTILE (▷) |

| | | |
|------|--------------|----------------------------|
| S904 | 1-554-303-21 | SWITCH, TACTILE (◁) |
| S905 | 1-554-303-21 | SWITCH, TACTILE (REC MUTE) |
| S906 | 1-554-303-21 | SWITCH, TACTILE (RESET) |
| S907 | 1-554-303-21 | SWITCH, TACTILE (MEMORY) |
| S908 | 1-554-303-21 | SWITCH, TACTILE (■) |

| | | |
|------|--------------|-----------------------|
| S909 | 1-554-303-21 | SWITCH, TACTILE (◁▷) |
| S910 | 1-554-303-21 | SWITCH, TACTILE (▷▷) |
| S911 | 1-554-303-21 | SWITCH, TACTILE (REC) |

< CONNECTOR >

| | | |
|---------|--------------|--------------------|
| * TP801 | 1-564-505-11 | PLUG, CONNECTOR 2P |
|---------|--------------|--------------------|

< CRYSTAL >

| | | |
|------|--------------|-------------------|
| X801 | 1-577-358-21 | VIBRATOR, CERAMIC |
|------|--------------|-------------------|

MISCELLANEOUS

| | | |
|-------|--------------|---|
| 1 | 1-575-781-11 | WIRE, FLAT TYPE (9 CORE) |
| △6 | 1-555-795-00 | CORD, POWER, EULO PLUG (AEP) |
| △6 | 1-558-945-11 | CORD, POWER (POLAR. SPT-1) (US, Canadian) |
| 103 | 1-638-983-11 | PC BOARD, MOTOR FLEXIBLE |
| △F701 | 1-532-285-00 | FUSE, TIME-LAG (AEP) |
| △F701 | 1-532-741-11 | FUSE, GLASS TUBE (US, Canadian) |
| △F702 | 1-532-285-00 | FUSE, TIME-LAG (AEP) |
| △F702 | 1-532-741-11 | FUSE, GLASS TUBE (US, Canadian) |
| M1 | X-3359-417-1 | MOTOR ASSY, CAPSTAN |
| M2 | X-3363-501-1 | MOTOR ASSY, REEL |



| Ref.No. | Part No. | Description | Remark |
|---------|--------------|-----------------------------------|--------|
| △T901 | 1-450-750-11 | TRANSFORMER, POWER (AEP) | |
| △T901 | 1-450-751-11 | TRANSFORMER, POWER (US, Canadian) | |


ACCESSORIES & PACKING MATERIALS

| | | |
|---|--------------|--|
| | 1-558-271-11 | CORD, CONNECTION |
| * | 3-350-830-01 | CUSHION |
| * | 3-376-443-81 | INDIVIDUAL CARTON |
| | 3-755-327-11 | MANUAL, INSTRUCTION (Canadian, AEP) (ENGLISH/FRENCH/SPANISH/PORTUGUESE) |
| | 3-755-327-21 | MANUAL, INSTRUCTION (US, Canadian) (ENGLISH) |
| | 3-755-327-41 | MANUAL, INSTRUCTION (AEP) (GERMAN/DUTCH/SWEDISH/ITALIAN) |

HARDWARE LIST

| | | |
|----|--------------|-------------------------|
| #1 | 7-682-548-09 | SCREW +BVTT 3X8 (S) |
| #2 | 7-682-547-04 | SCREW +BVTT 3X6 (S) |
| #3 | 7-621-849-00 | SCREW (BV/RING) |
| #4 | 7-621-773-95 | SCREW +BVTT 2.6X6 (S) |
| #5 | 7-685-134-19 | SCREW (+ PTPWH) (2.6X8) |
| #6 | 7-621-775-00 | SCREW +B 2.6X3 |
| #7 | 7-627-556-08 | SCREW +P 2.6X2.8 |

Note:
The components identi-
fied by mark  or dot-
ted line with mark 
are critical for safety.
Replace only with part
number specified.

Note:
Les composants identifiés par
une marque  sont critiques
pour la sécurité.
Ne les remplacer que par une
pièce portant le numéro spé-
cifié.